



alchip



Stock Code: 3661

# **Alchip Technologies, Limited**

## **2020 Annual Report**

Taiwan Stock Exchange Market Observation Post System: <http://mops.twse.com.tw>  
Alchip Annual Report is available at: <http://www.alchip.com/>

Printed on April 13, 2021

**I. Name, Title and Contact Information for Company's Spokesperson, Acting Spokesperson, Litigious and Non-litigious Agent**

<b>Spokesperson</b>	<b>Deputy Spokesperson</b>	<b>Litigious and Non-litigious Agent</b>
Name : Daniel Wang	Name : Johnny Shen	Name : Nancy Chan
Title : Chief Financial Officer	Title : CEO	Title : Financial Controller
Tel : 886-2-2659-9357	Tel : 886-2-2799-2318	Tel : 886-2-2799-2318
E-mail : IR@alchip.com	E-mail : IR@alchip.com	E-mail : IR@alchip.com

**II. Contact Information of Company's Headquarters, Branches and Plant**

<b>Office</b>	<b>Address</b>	<b>Tel.</b>
<b>(I) The Company</b>		
Alchip Technologies, Ltd.	PO Box 309, Uglan House, Grand Cayman, KY-1104, Cayman Islands	886-2-2799-2318
<b>(II) Subsidiaries</b>		
1. The subsidiary in Taiwan: Alchip Technologies, Inc.	9F., No.12, Wenhua St., Neihu Dist., Taipei, Taiwan 114	886-2-2799-2318
2. The branch in Taiwan: Alchip Technologies, Ltd. Taiwan Branch	9F., No.12, Wenhua St., Neihu Dist., Taipei, Taiwan 114	886-2-2799-2318
3. The subsidiary in Hong Kong: Alchip Technologies, Ltd.	Bank of America Tower, 12 Harcourt Road Central, Hong Kong	852-2522-2922
4. The sub-subsidiary in Shanghai: Alchip Technologies, Ltd. (Shanghai)	Registered Address: Room 632-19, 2 F., No. 351, Guoshoujing Rd., Zhangjiang Hi-Tech Park, Shanghai Business Address: 11F, East tower Greenland Center, 596 Middle Longhua Road, Shanghai, China 200032	86-21-5235-0999
5. The subsidiary in Japan: アルチップ・テクノロジーズ Co., Ltd. (Alchip Technologies, K.K.)	10F Shin-Yokohama Square Bldg, 2-3-12 Shin-Yokohama, Kouhoku Yokohama Kanagawa Japan, 222-0033	81-45-470-1090
6. The subsidiary in U.S.: AlChip Technologies, Inc.	1900 McCarthy Blvd, Suite 106, Milpitas, CA 95035	1-408-943-8296
7. The sub-subsidiary in Wuxi: Alchip Technologies (Wuxi) Inc.	4F, Building A5, No.777, Jianzhuxi Road, Binhu District, Wuxi, Jiangsu, China	86-510-8512-0332
8. Alchip's BVI incorporated subsidiary: Alchip Investment Inc.	Portcullis TrustNet Chambers, 4th Floor Ellen Skelton Building, 3076 Sir Francis Drake Highway, Road Town, Tortola, British Virgin Islands VG1110	886-2-2799-2318
9. The sub-subsidiary in Hefei: Alchip Technologies (Hefei) Inc.	Room 605-610, Building C4, Innovation Industrial Park, No.800 West Wangjiang Road, Hefei, China	86-551-65655001
10. The sub-subsidiary in Jinan: Alchip Technologies (Jinan) Inc.	1F, Building B, Qilu Software Park, No.1000 ShunHua Road, High-tech Development Zone, Ji'nan City, China	86-531-89017990
11. The sub-subsidiary in Guangzhou: Alchip Technologies (Guangzhou) Inc.	Room 01, 12F, Grandtek, No.18 Science Avenue, Huangpu District, Guangzhou, China	86-20-89819302

### III. Members of the Board of Directors

Title	Name	Nationality	Academic Qualifications and Principal Work Experience	
Chairman	Kinying Kwan	U.S., R.O.C.	Academic Qualifications	<ul style="list-style-type: none"> <li>• B.S. in Electronic Engineering, University of Illinois, U.S.</li> </ul>
			Work Experience	<ul style="list-style-type: none"> <li>• CEO of the Company</li> <li>• Founder of Altius Solutions</li> </ul>
Director	Herbert Chang	R.O.C.	Academic Qualifications	<ul style="list-style-type: none"> <li>• M.S. in Management Science, National Chiao Tung University</li> </ul>
			Work Experience	<ul style="list-style-type: none"> <li>• General Manager of Mutto Optronics Corporation</li> </ul>
Director	Johnny Shyang-Lin Shen	U.S., R.O.C.	Academic Qualifications	<ul style="list-style-type: none"> <li>• B.S. of Electronic Engineering, University of California, Los Angeles, U.S.</li> </ul>
			Work Experience	<ul style="list-style-type: none"> <li>• COO of the Company</li> <li>• GM of China Business Unit and VP of SoC Design Div. of the Company</li> </ul>
Director	Daniel Wang	R.O.C.	Academic Qualifications	<ul style="list-style-type: none"> <li>• MBA of Baruch College-The City University of New York, U.S.</li> </ul>
			Work Experience	<ul style="list-style-type: none"> <li>• Representative of Fubon Securities Co., Ltd. Shanghai Representative Office</li> </ul>
Independent Director	Mao-Wei Hung	R.O.C.	Academic Qualifications	<ul style="list-style-type: none"> <li>• Ph.D., Finance, Northwestern University, U.S.</li> </ul>
			Work Experience	<ul style="list-style-type: none"> <li>• Professor, Department of International Business, National Taiwan University</li> <li>• Dean of College of Management, National Taiwan University</li> <li>• Chairman of Board, Taiwan Academy of Banking and Finance</li> </ul>
Independent Director	Brian Chiang	R.O.C.	Academic Qualifications	<ul style="list-style-type: none"> <li>• B.S. of Business Administration, University of Southern California, U.S.</li> </ul>
			Work Experience	<ul style="list-style-type: none"> <li>• Managing Director of Walden International Taiwan Co., Ltd.</li> </ul>
Independent Director	Binfu Chuang	U.S.	Academic Qualifications	<ul style="list-style-type: none"> <li>• M.S. in Electrical Engineering, Oregon State University, U.S.</li> </ul>
			Work Experience	<ul style="list-style-type: none"> <li>• Director and General Manager of Shanghai SyncMOS Semiconductor Co., Ltd.</li> </ul>

#### IV. Contact information of Share Transfer Agent

Name: Transfer Agent Department of CTBC Bank  
Address: 5F., No. 83, Section 1, Chongqing S. Rd., Zhongzheng District, Taipei City 100, Taiwan  
Tel: 886-2-6636-5566 Website: <https://www.ctcbank.com>

#### V. Contact information of Auditing CPA

CPA Firm: Deloitte & Touche  
Name of CPA: Yi-Wen Wang and Shih-Tsung Wu  
Address: 20F., No. 100, Songren Rd., Xinyi District, Taipei 11073, Taiwan  
Tel: 886-2-2725-9988 Website: <http://www.deloitte.com.tw>

#### VI. Names of stock exchanges where foreign securities are listed and inquiry on the information of foreign securities: None.

#### VII. The Company's web address: <http://www.alchip.com>

#### 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.*

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# **I. Letter to Shareholders**

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**Dear Shareholders,**

As a leader in High-Performance Computing ASIC design, Alchip focuses on the ASIC back-end design and turnkey service within the leading edge technology nodes. Counter to the negative impact on the global economy brought about by the COVID-19 pandemic, Alchip benefited from a resulting shift in work habits and consumer behavior, due in part to a strong demand from high-performance computing and artificial intelligence market segments.

The global semiconductor industry has become more competitive over the past few years and is experiencing a strong demand for ASIC services, driven by the growing breadth of artificial intelligence, high-performance computing and Internet of Things applications. Given this trend, Alchip has completed a significant number of leading edge projects and most of them are among these categories. Most of these projects Alchip completed were in the 7nm technology node. Some of them were already entering the mass production phase in the second half of 2020 and this was the major reason for company's record breaking performance. In addition, company was also experiencing strong demand for high performance computing, especially from the Great China region. Alchip taped-out a number of 7nm designs and even our first 5nm test chip.

On the R&D front, Alchip strengthened its technology leading position further in 2020. Approximately 93% of the Company's revenue came from advanced process node (28nm and smaller) design and managed production. In addition, we successfully partnered with tier-one systems customers to complete a number of 16nm and 7nm designs that targeted high-end, complex artificial intelligence, networking and high-performance computing applications.

To analyze by sales territories, with the rapid growth of high demands in the HPC market, China was the first largest source of revenue. With the continued supports from the system customers, Japan was the second largest source of revenue. North America emerges as Alchip's third largest source of revenue as its high demands for AI application.

## **Financial Performance**

Alchip's 2020 total revenue reached NTD7,079M, a 63.41% increase YoY from NTD4,332M in 2019. The 2020 net income was NTD835M, a 92.59% increase YoY from NTD434M in 2019. In US Dollars (USD) basis, the 2020 revenue came at USD240M, a 70.95% increase YoY, and the net income was USD28M, a 101.48% increase YoY. For other 2020 financial figures, the gross margin was 32.59%, operating margin was 13.94%, and the ROA and ROE were 11.69% and 23.22%, respectively.

## **Technological Developments**

Alchip continued to heavily invest in advanced technology design and customized IP during 2020 in response to ongoing customer demand. Building on the successful implementation of multiple 7nm designs and its successful leading edge 5nm design projects, Alchip will fortify its position as an advanced technology leader when it moves into 3nm designs in 2021.

## **Corporate Developments**

To further enhance our engineering resource and business development, Alchip opened its North America operations office in 2019. In 2020, Alchip continued to expand its global influence in the Great China region by establishing offices in Shenzhen and Beijing. Alchip is dedicated to staying ahead the significant increase in customers demand in these two markets and will develop more advanced process design technology to meet those needs. With our advanced technology and design capability, we strive to become the leading brand in the ASIC industry.

## **Outlook for the future**

Alchip will continue to capitalize on market opportunities best suited to its advanced technology strengths and enhanced strategic alliances with major IP partners. We will continue to focus on new applications developing in our high growth artificial intelligence, high-performance computing, and IoT market segments. In addition, we endeavor to expand our share of the North America market. Last but not least, we believe that, through our core competence of providing industry leading services for advanced processing nodes, Alchip will again post strong revenue and profit growth in 2021 as we continue to create value for both our customers and our shareholders.

Best wishes for good health and prosperity!



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Kinying Kwan  
Chairman



## **II. Company Profile**

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### **2.1 Date of Establishment and Company Introduction**

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Founded in the British Cayman Islands on February 27, 2003 by the core technical team of a well-known Silicon Valley System-on-Chip company under the leadership of Chairman Kinying Kwan, Alchip Technologies, Limited (hereinafter referred to as the “Company” or “Alchip”) is a leading provider of silicon design and manufacturing services for system companies developing high-complexity and high-volume application-specific integrated circuit (ASIC) and System-on-Chip (SoC) integrated circuits (IC’s).

Headquartered in Taipei, Taiwan, Alchip has established an ASIC manufacturing center in Hsinchu. Based on its global development policy, the Company has established subsidiaries in China, Japan, and America (hereinafter referred to as the “Group”). The Company had a total of 426 employees in December 2020. The Group’s management team has possess many years of in-depth IC design service experience. The team is composed of SoC design experts from U.S. Silicon Valley and Japan, with an average of over 20 years of management experience in the semiconductor industry. Their capability for high-end process and chip design has proven to superior to that of competitors’ in the industry. Three years after its establishment, the Company completed many ASIC designs, ranging from 0.13-microns down to 65nm and moved them into mass production. In 2009, it started mass-production of 40nm designs and started designing at 28nm in 2013. By 2014, it was providing customers 16nm design services in 2014 and took its first 14nm designs to wafer start sin September 2015. By 2017, the Company successfully completd several super compuer 28nm and 16nm designs and, in 2019, completed several 7nm high-performance design projects. At the end of 2020, Alchip completed, prototyped, and began the volume production of its first 7nm designs targeting artificial intelligence and high performance computing applications.

Alchip focuses on ASIC and SoC designs that target 28nm and smaller deep submicron manufacturing processes. The Company’s services help ASIC and SoC customers to complete low-cost and high-complexity IC design in the shortest time and speed their time-to-market. The Company has completed more than 450 designs. Alchip focuses on three main market segments: Artificial Intelligence and High-performance Comuting, Communication Network Equipment, and other consumer business, and medical electronic products (high definition television, digital cameras, entertainment systems, mobile broadband, medical devices, and medical monitoring systems.)

## 2.2 Company Milestones

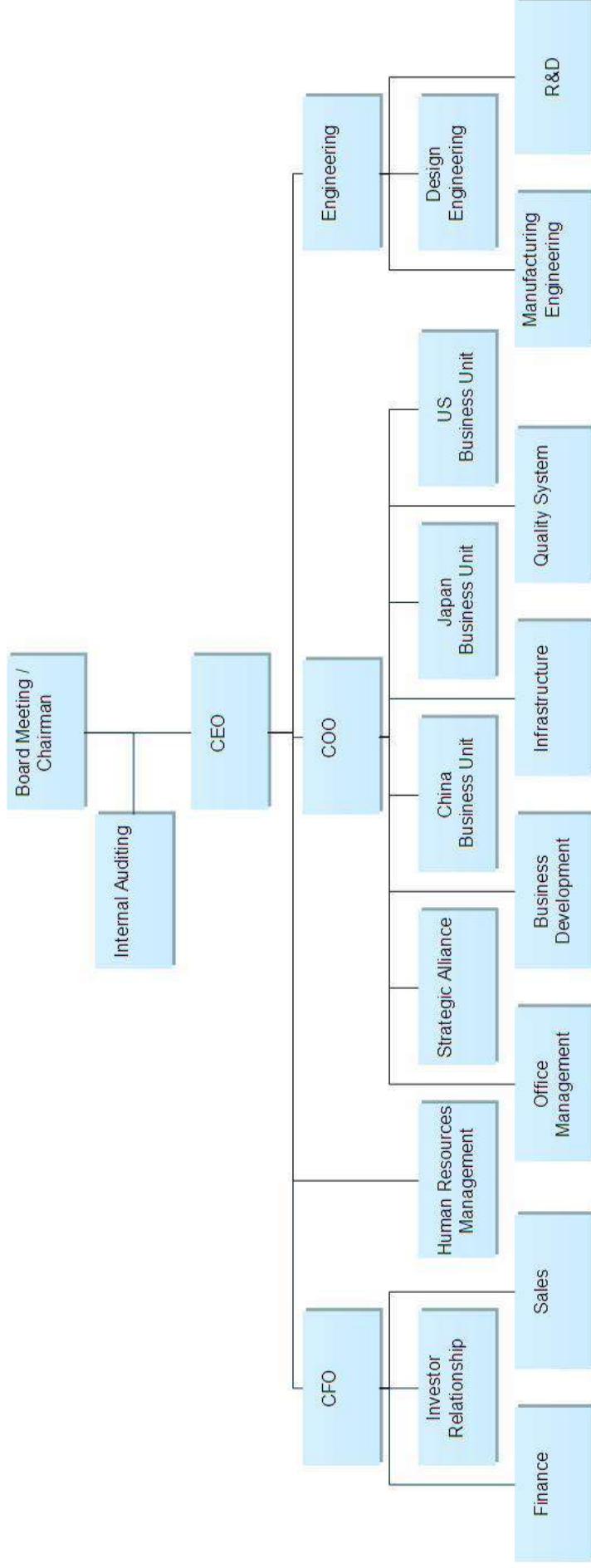
Aug. 2002	The subsidiary was established in Hong Kong.
Sep. 2002	The subsidiary was established in Shanghai.
Feb. 2003	Established an exempted company in the Cayman Islands.
Apr. 2003	Alchip Technologies (Cayman) invested in the subsidiaries in Hong Kong and Shanghai through share exchange.
May 2003	The subsidiary was established in U.S.
Aug. 2003	The first 0.13 um chip design was completed.
Feb. 2004	The subsidiary was established in Japan.
Jul. 2004	Joined the TSMC's Design Center Alliance (DCA).
Sep. 2004	Obtained the order for 0.13 um, 16M gate design from Japan's big firm M Company.
Nov. 2004	Completed the first SoC design for 90 nm, 6M gate high-end consumer electronics, and entered mass production in the second half of 2005.
Jan. 2005	The subsidiary was established in Taiwan.
Apr. 2005	Won the order for 90 nm, 500MHz high-speed calculation SoC design and became the first product across the globe to enter 90G mass production at TSMC.
Aug. 2005	The monthly shipment reached 1 million units of System on Chip (SoC).
Jun. 2006	Developed the 65 nm ARM 1176 embedded multi-core application processor.
Sep. 2006	Won the order for digital cameras SoC design from Japan's system big firm.
Nov. 2006	Passed ISO9001 certification.
Dec. 2006	The monthly shipment reached 2 million units of SoC.
Feb. 2007	Won the order for 65 nm SoC design.
May 2007	Won the order for HDTV SoC design from Japan's system big firm.
Jun. 2007	The monthly shipment reached 2.5 million units of SoC.
Jul. 2007	Adopted the Verigy V93000 Pin-Scale 800 system as its new-generation chip testing machine.
Jan. 2008	Won the order for mobile communication devices SoC design from a system big firm.
Feb. 2008	Got ARM authorization.
Mar. 2008	Won the order for digital TV SoC design from Japan's system big firm.
Mar. 2008	Joined the Cadence (Power Forward Initiative, PFI) Alliance.
Apr. 2008	Joined the ARM Connected Community to become an ARM partner.
May 2008	Became a partner of packaging technology with SONY Semiconductor Group.
Jun. 2008	Alchip was named as the "China's 10 Best Service IC Design House" by 2008 "Electronic Engineering Times".
Aug. 2008	Adopted the Synopsys Eclipse's low-power design solutions.
Oct. 2008	Mass-produced 65 nm turnkey solution.
Nov. 2008	Won the first 65 nm design case for turnkey solution.
Dec. 2008	Alchip was awarded the special honor to be a "Green Partner" of a Japan's system big firm.
Dec. 2008	Set up heat flow and automated sorting machine.
Feb. 2009	Took part in the ebeam Initiative.
Apr. 2009	Alchip was elected to one of TSMC's global top 9 members of VCA.
Dec. 2009	The Company mass-produced 55 nm turnkey solution.
Dec. 2009	Completed the 40 nm design case for Mobile Game of a system big firm.
Mar. 2010	The monthly shipment reached 2.5 million units of SoC.
Oct. 2010	Completed the 32 nm application design case for HDTV of a system big firm.
Dec. 2010	The accumulated shipment of 55 nm design cases exceeded 10 million units of SoC.
Jan. 2011	Set up a UF3000 Wafer Prober.
Mar. 2011	Completed the 55 nm application design case for Tablet PC.
Apr. 2011	The accumulated shipment of 55 nm design cases exceeded 18 million units of SoC.
Jul. 2011	Alchip's Headquarters moved to Solar Technology Square, Taipei Neihu Technology Park.
Sep. 2011	Completed the 40 nm design case for imaging equipment.
Feb. 2012	Gained the special honor to be a "2011 Best Supplier of the Year Award" of a Japan's big firm.
Mar. 2012	Won the order for 28 nm SoC design.
May 2012	Alchip's shipments in cooperation with ASE Group hit 50 million units of SoC.
Aug. 2012	The subsidiary was established in Wuxi China.
Sep. 2012	Completed the 28 nm design case for Mobile Game of a system big firm.
Dec. 2012	Alchip was awarded the special honor to be the Deloitte Technology Fast 500 Asia Pacific.
Dec. 2012	The subsidiary in Japan passed ISO9001 certification.
Jun. 2013	Won the No. 1 in the annual evaluation on partners of a Japan's big firm.

Jul. 2013	Completed the 28 nm design case for Bitcoin mining machine.
Aug. 2013	Completed the 40 nm design case for high-efficiency imaging equipment.
Sep. 2013	Completed the 28 nm design case for processor (supercomputer).
Feb. 2014	Completed the 20 nm design case for Bitcoin mining machine.
May 2014	Completed the 28 nm design case for medical device of a Japan's big firm.
Jun. 2014	Won the No. 1 in the annual evaluation on partners of a Japan's big firm.
Jun. 2014	Completed the 28 nm design case for Litecoin mining machine.
Sep. 2014	Completed the 28 nm design case for entertainment machine of a Japan's big firm.
Oct. 2014	The Company's shares were publicly listed on the Taiwan Stock Exchange.
Jan. 2015	Alchip's BVI incorporated subsidiary and Alchip's Taiwan Branch were established.
Feb. 2015	Completed the 16 nm design case for Bitcoin mining machine.
Jul. 2015	Completed the 28 nm design case for high-efficiency imaging equipment of a Korea's firm.
Sep. 2015	Completed the 14 nm design case for Bitcoin mining machine.
Feb. 2016	Completed the 28 nm design case for imaging equipment of a Japan's big firm.
Jul. 2016	Completed the 28 nm design case for networking equipment of a China's big firm.
Oct. 2016	The subsidiary was established in Hefei China.
Dec. 2016	Completed the 16 nm design case for HPC equipment of a Japan's big firm.
Jan. 2017	Completed the 16 nm design case for networking equipment of a China's big firm.
Feb. 2017	Completed the 16 nm design case for high performance computer of a China's big firm.
Aug. 2017	The office was established in Guangzhou China.
Jan. 2018	Completed 7nm SoC Design for Bitcoin Mining Machines.
Jan. 2018	Completed 16nm SoC Design for AI application.
Apr. 2018	The subsidiary was established in Jinan China.
Oct. 2018	Completed 12nm SoC Design for AI application.
Jun. 2019	Expand NA business, new office established.
Sep. 2019	Completed the 16nm design case for high performance computing (CPU) of a China's big firm.
Dec. 2019	Completed 16nm SoC Design for consumer automotive application.
Jan. 2020	Completed the 7nm design case for AI application of a China's big firm.
Feb. 2020	Completed the 12nm design case for networking application of a Japan's big firm.
Jun. 2020	Completed the 7nm design case for high performance computing of a China's big firm.
Jun. 2020	The subsidiary was established in Guangzhou China.
Sep. 2020	Completed the 6nm design case for AI application.
Sep. 2020	The office was established in Shenzhen China.
Dec. 2020	Completed and taped out first 5nm test chip.
Jan. 2021	The office was established in Beijing China.

# III. Corporate Governance Report

## 3.1 Organization

### 3.1.1 Organizational chart



### 3.1.2 Major corporate functions

Department Name	Responsibilities
Finance	Responsible for the Company's fund allocation and accounting treatments.
Investor Relationship	<ol style="list-style-type: none"> <li>1. Handling all matters relating to the Taiwan Stock Exchange.</li> <li>2. Make routine communications with investors (natural persons and juridical persons).</li> <li>3. Hold Investment Conferences for potential investors.</li> <li>4. Invite investors to participate in negotiation conferences.</li> </ol>
Strategy Alliance	<ol style="list-style-type: none"> <li>1. Develop and maintain partnerships with strategic suppliers.</li> <li>2. Negotiate the target price with suppliers to provide pre-sales support for relevant departments.</li> <li>3. Develop new suppliers or introduce competitive / high-end technologies from current suppliers to achieve the cost-effectiveness.</li> <li>4. Develop and implement all procurement policies and ensure efficient operations of procurement and organizational interests.</li> </ol>
Business Development	<ol style="list-style-type: none"> <li>1. Develop business growth strategy.</li> <li>2. New high growth application market development along with its solution preparation.</li> <li>3. Brand development in global markets.</li> </ol>
Design Engineering	Complete the design realization from RTL or netlist to GDSII for customers.
R&D	<ol style="list-style-type: none"> <li>1. Provide design SOP, flow &amp; methodology. Establish SoC design platform.</li> <li>2. Circuit &amp; customization. Define and optimize design SOP, flow &amp; methodology.</li> <li>3. Develop analog/mixed-signal silicon intellectual property. Customize high-performance/low-power digital circuit.</li> <li>4. Provide customized circuit design services and technical support for business units. Develop analog/mixed-signal silicon intellectual property.</li> <li>5. Provide 2.5D/3D chip design solution and technical support to business units.</li> </ol>
Manufacturing Engineering	<ol style="list-style-type: none"> <li>1. Develop and complete R&amp;D direction and objectives of the Company's production technologies.</li> <li>2. Provide advanced testing and packaging and solutions for product / component engineering.</li> </ol>
Japan Business Unit	Japan Business development, customer services and project management of business units.
US Business Unit	US Business development, customer services and project management of business units.
China Business Unit	China Business development, customer services and project management of business units.
Sales	Business development and customer services.
Quality System	Responsible for the planning, implementation and management of the Company's quality policy.
Infrastructure	Responsible for the planning, implementation and management of information operations.
Internal Auditing	Assist the Board of Directors, CEO, and management in the examination and assessment for the internal control system, measure the efficiency and effectiveness of operations, and provide timely proposals for improvement as the basis for amendment on the internal control systems so as to ensure its sustainable and effective operation.
Human Resources Management	Human Resources management and development.
Office Management	Control the whole administrative management such as the Company's administration & general affairs, and safety & hygiene.

### 3.2 Information on the Company's Directors, Supervisors, General Managers, Vice Presidents, Deputy Managers and Heads of All the Company's Divisions and Branches

#### 3.2.1 Information on Directors

April 13, 2021

Title	Nationality	Name	Gender	Date Elected	Term of Office	Date of First Elected	Shareholding when Elected		Current Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement		Academic Qualifications & Major Experience	Other Position	Executives, Directors or Supervisors who are spouses or within two degrees of kinship			Remark	
							Shares	%	Shares	%	Shares	%	Shares	%			Title	Name	Relation		
Chairman	U.S.A, R.O.C.	Kinying Kwan	Male	06/21/2019	3	02/27/2003	680,000	1.13%	482,000	0.69%	0	0%	0	0%	<b>Academic Qualifications:</b> <ul style="list-style-type: none"> <li>■ B.S. in Electronic Engineering, University of Illinois, U.S.</li> </ul> <b>Work Experience:</b> <ul style="list-style-type: none"> <li>■ CEO of the Company</li> <li>■ Founder of Altius Solutions</li> </ul>	<ul style="list-style-type: none"> <li>■ Director of the Company's subsidiary in Taiwan</li> <li>■ Director of the Company's subsidiary in Japan</li> <li>■ Director of the Company's subsidiary in U.S.</li> <li>■ Director of the Company's subsidiary in Hong Kong</li> </ul>			None	None	None
Director	U.S.A, R.O.C.	Johnny Shyang-Lin Shen	Male	06/21/2019	3	05/18/2011	1,041,652	1.73%	1,441,652	2.05%	0	0%	0	0%	<b>Academic Qualifications:</b> <ul style="list-style-type: none"> <li>■ B.S. in Electronic Engineering, University of California, Los Angeles, U.S.</li> </ul> <b>Work Experience:</b> <ul style="list-style-type: none"> <li>■ COO of the Company</li> <li>■ GM of China Business Unit and VP of SoC Design Div. of the Company</li> </ul>	<ul style="list-style-type: none"> <li>■ GM of the Company's subsidiary in Taiwan</li> <li>■ Managerial Officer of the Company's branch in Taiwan</li> <li>■ Supervisor of the Company's sub-subsubsidiary in Wuxi</li> <li>■ Supervisor of the Company's sub-subsubsidiary in Hefei</li> <li>■ Supervisor of the Company's sub-subsubsidiary in Jinan</li> <li>■ Supervisor of the Company's sub-subsubsidiary in Guangzhou</li> </ul>			None	None	None

Director	R.O.C.	Herbert Chang	Male	06/21/ 2019	3	04/09/ 2003	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	None	None	None	None	<ul style="list-style-type: none"> <li>■ Director of Monolithic Power Systems, Inc.</li> <li>■ Chairman of Cheng-Hsin Consultant, Co, Ltd.</li> <li>■ Director of Trompy Co., Ltd</li> <li>■ Director of TCERA CO., LTD.</li> <li>■ Supervisor of Offerme2 Media Limited</li> <li>■ Director of JINHER INFO CO., LTD.</li> <li>■ Director (Legal Representative)/Chairman of Midastek</li> <li>■ Director (Legal Representative) of Moregeek</li> <li>■ Director of vTradEx Entertainment, Inc.</li> <li>■ Director of vTradEx Information Technology (Shanghai) Co., Ltd</li> <li>■ Director of Moregeek Technology Holdings, Inc.</li> <li>■ Director of The News Lens Co., Ltd.</li> <li>■ Director of Walden Greater China Ventures, Ltd.</li> <li>■ Director of Zombot Studio Inc.</li> </ul>
Director	R.O.C	Daniel Wang (Note 2)	Male	06/21/ 2019	3	06/21/ 2019	50,000	0.08%	113,000	0.16%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	None	None	None	None	<ul style="list-style-type: none"> <li>■ Director of Aichip’s BVI incorporated subsidiary</li> <li>■ Director of the Company’s sub-subsiary in Wuxi</li> <li>■ Director of the Company’s sub-subsiary in Hefei</li> <li>■ Director of the Company’s sub-subsiary in Jinan</li> </ul>
Independent Director	R.O.C.	Mao-Wei Hung	Male	06/21/ 2019	3	11/05/ 2010	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	None	None	None	None	<ul style="list-style-type: none"> <li>■ Academic <b>Qualifications:</b> <ul style="list-style-type: none"> <li>■ M.S. in Management Science, National Chiao Tung University</li> </ul> </li> <li>■ <b>Work Experience:</b> <ul style="list-style-type: none"> <li>■ General Manager of Mutoo Optronics Corporation</li> </ul> </li> </ul>
Independent Director	R.O.C.	Mao-Wei Hung	Male	06/21/ 2019	3	11/05/ 2010	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	None	None	None	None	<ul style="list-style-type: none"> <li>■ Academic <b>Qualifications:</b> <ul style="list-style-type: none"> <li>■ Ph.D., Finance, Northwestern University, U.S.</li> <li>■ M.A. in Economics, University of Wisconsin-Madison, U.S.</li> </ul> </li> <li>■ <b>Work Experience:</b> <ul style="list-style-type: none"> <li>■ Representative of Fubon Securities Co., Ltd. Shanghai Representative Office</li> </ul> </li> <li>■ Academic <b>Qualifications:</b> <ul style="list-style-type: none"> <li>■ Professor of International Business Department, National Taiwan University</li> <li>■ Independent Director of Mutoo Optronics Corporation</li> <li>■ Independent Director of Fubon Securities Co., Ltd.</li> </ul> </li> </ul>





**Professional qualifications and independence analysis of Directors**

April 13, 2021

Criteria	Meet One of the Following Professional Qualification Requirements, Together with at Least Five Years Work Experience							Independence Criteria(Note)							Number of Other Taiwanese Public Companies Concurrently Serving as an Independent Director
	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 Specialist Who has Passed a National Examination and been Awarded a Certificate in a Profession Necessary for the Business of the Company	Have Work Experience in the 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	
Name															
Kinying Kwan			✓			✓	✓	✓			✓	✓	✓	✓	0
Herbert Chang			✓			✓	✓	✓	✓		✓	✓	✓	✓	0
Johnny Shiyang-Lin Shen			✓			✓	✓	✓			✓	✓	✓	✓	0
Daniel Wang (Note 3)			✓			✓	✓	✓			✓	✓	✓	✓	0
Mao-Wei Hung	✓					✓	✓	✓	✓		✓	✓	✓	✓	2
Brian Chiang			✓			✓	✓	✓	✓		✓	✓	✓	✓	0
Binfu Chuang			✓			✓	✓	✓	✓		✓	✓	✓	✓	0

Note 1 : Please tick the corresponding boxes that apply to the directors or supervisors during the two years prior to being elected or during the term of office.

1. Not an employee of the Company or any of its affiliates.
2. Not a director or supervisor of the Company or any of its affiliates. (However, in cases where the person is an independent director of the company, its parent company, or any subsidiary, or the subsidiary which belongs to the same parent company as appointed in accordance with the Act or with the laws of the country of the parent or subsidiary, it does not apply.)
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. Not a managerial officer included in the 1<sup>st</sup> item above or a spouse, relative within the second degree of kinship, or lineal relative within the third degree of kinship, of any of the persons included in the 2<sup>nd</sup> or 3<sup>rd</sup> item above.
5. Not a director, supervisor, or employee of a corporate shareholder who directly holds 5% or more of the total number of outstanding shares of the Company or who holds shares ranking in the top five holdings or the representative who is appointed based on 1 or 2 in Article 27 of the Company Act. (However, in cases where the person is an independent director of the company, its parent company, or any subsidiary, or the subsidiary which belongs to the same parent company as appointed in accordance with the Act or with the laws of the country of the parent or subsidiary, it does not apply.)
6. Not a director, supervisor or employee of other company controlled by the same person when more than half of the company's director seat or voting shares. (However, in cases where the person is an independent director of the company, its parent company, or any subsidiary, or the subsidiary which belongs to the same parent company as appointed in accordance with the Act or with the laws of the country of the parent or subsidiary, it does not apply.)
7. Not a director, supervisor or employee of other companies or institutions who is the same person or spouse with the company's chairman, General Manager or equivalent. (However, in cases where the person is an independent director of the company, its parent company, or any subsidiary, or the subsidiary which belongs to the same parent company as appointed in accordance with the Act or with the laws of the country of the parent or subsidiary, it does not apply.)

8. Not a director, supervisor, managerial 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. (However, if a specific company or institution holds more than 20% but not more than 50% if the total issued shares of the company, and the independent directors set by the company and its parent company, subsidiaries, or subsidiaries of the same parent company in accordance with this law or local laws and regulations.)
9. Not a professional individual who, or an owner, partner, director, supervisor, or managerial officer and their spouse of a sole proprietorship, partnership, company, or institution that, provides audit or business, legal, financial, accounting services or consultation to the Company or to any affiliate of the Company that have received cumulative remuneration which is not exceeding NT\$500,000 in past two years. Except for members of the remuneration committee, the public acquisition review committee or the special committee on mergers and acquisitions that perform their functions in accordance with the relevant laws of the Securities and Exchange Act or 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.

### 3.2.2 Information of General Managers, VPs, Deputy General Managers and Heads of All the Company's Divisions and Branches

April 13, 2021

Title	Nationality	Name	Gender	Date of Inauguration	Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement		Academic Qualifications & Major Experience	Position(s) Held Concurrently in any Other Company	With Spouse or Relative Within the Second Degree of Kinship who is a Managerial Officer		Remark
					Shares	Holding Percentage	Shares	Holding Percentage	Shares	Holding Percentage			Title	Name	
CEO	U.S., R.O.C.	Johnny Shyang-Lin Shen	Male	01/01/2010	1,441,652	2.05%	0	0%	0	0%	<b>Academic qualifications:</b> <ul style="list-style-type: none"> <li>■ B.S. in Electronic Engineering, University of California, Los Angeles, U.S.</li> </ul> <b>Work experience:</b> <ul style="list-style-type: none"> <li>■ COO of the Company</li> <li>■ GM of China Business Unit and VP of SoC Design Div., the Company</li> </ul>	<ul style="list-style-type: none"> <li>■ GM of the Company's subsidiary in Taiwan</li> <li>■ Managerial Officer of the Company's branch in Taiwan</li> <li>■ Supervisor of the Company's sub-sub-subsidiary in Wuxi</li> <li>■ Supervisor of the Company's sub-sub-subsidiary in Hefei</li> <li>■ Supervisor of the Company's sub-sub-subsidiary in Jinan</li> <li>■ Supervisor of the Company's sub-sub-subsidiary in Guangzhou</li> </ul>	None	None	None
GM of Japan Business Unit	Japan	Junichiro Hosaka	Male	07/02/2009	40,000	0.07%	0	0%	0	0%	<b>Academic qualifications:</b> <ul style="list-style-type: none"> <li>■ B.A. in Economics, YOKOHAMA National University</li> </ul> <b>Work experience:</b> <ul style="list-style-type: none"> <li>■ Chief Financial Officer of the Company</li> <li>■ Chief Financial Officer of Inno Micro Corporation</li> </ul>	<ul style="list-style-type: none"> <li>■ Chairman of the Company's subsidiary in Japan</li> </ul>	None	None	None
GM of China Business Unit	R.O.C.	Andy Lin	Male	11/11/2016	127,167	0.18%	0	0%	0	0%	<b>Academic qualifications:</b> <ul style="list-style-type: none"> <li>■ MBA, University of Oxford</li> <li>■ B.S. in Business Administration, National Taiwan University</li> </ul> <b>Work experience:</b> <ul style="list-style-type: none"> <li>■ VP of China Business Unit, the Company</li> <li>■ Sales Manager of Logitech International S.A.</li> </ul>	<ul style="list-style-type: none"> <li>■ Chairman and GM of the Company's sub-subsidiary in Wuxi</li> <li>■ Chairman and GM of the Company's sub-subsidiary in Hefei</li> <li>■ Chairman and GM of the Company's sub-subsidiary in Jinan</li> <li>■ Chairman and GM of the Company's sub-subsidiary in Shanghai</li> </ul>	None	None	None

Title	Nationality	Name	Gender	Date of Inauguration	Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement		Academic Qualifications & Major Experience	Position(s) Held Concurrently in any Other Company	With Spouse or Relative Within the Second Degree of Kinship who is a Managerial Officer		Remark
					Shares	Holding Percentage	Shares	Holding Percentage	Shares	Holding Percentage			Title	Name	
												Chairman and GM of the Company's sub-sub- subsidiary in Guangzhou			
GM of US Business Unit	Japan	Hiroyuki Nagashima	Male	03/15/2019	0	0%	0	0%	0	0%	<b>Academic qualifications:</b> <ul style="list-style-type: none"> <li>B.S in Computer Science ,Tokyo University of Science</li> </ul> <b>Work experience:</b> <ul style="list-style-type: none"> <li>GM of Japan Business Unit, the Company</li> <li>Senior Manager of Cadence Design System</li> </ul>	None	None	None	
Sr. VP of Design Engineering	R.O.C.	Leo Cheng	Male	08/15/2012	100,026	0.14%	0	0%	0	0%	<b>Academic qualifications:</b> <ul style="list-style-type: none"> <li>M.S. in Electronic Engineering, University of Southern California, U.S.</li> </ul> <b>Work experience:</b> <ul style="list-style-type: none"> <li>Director, Design Engineering Div. of the Company</li> </ul>	<ul style="list-style-type: none"> <li>Director of the Company's sub-sub- subsidiary in Wuxi</li> <li>Director of the Company's sub-sub- subsidiary in Hefei</li> <li>Director of the Company's sub-sub- subsidiary in Jinan</li> <li>Director of the Company's sub-sub- subsidiary in Guangzhou</li> </ul>	None	None	None
Sales VP	R.O.C.	Robert Chang	Male	11/03/2017	90,000	0.13%	0	0%	0	0%	<b>Academic qualifications:</b> <ul style="list-style-type: none"> <li>B.S. in Business Administration, Soochow University</li> </ul> <b>Work experience:</b> <ul style="list-style-type: none"> <li>AP BU Director of the Company</li> </ul>	None	None	None	
CFO	R.O.C.	Daniel Wang	Male	12/29/2011	113,000	0.16%	0	0%	0	0%	<b>Academic qualifications:</b> <ul style="list-style-type: none"> <li>MBA of Baruch College-The City University of New York, U.S.</li> </ul> <b>Work experience:</b> <ul style="list-style-type: none"> <li>Representative of Fubon Securities Co., Ltd. Shanghai Representative Office</li> </ul>	<ul style="list-style-type: none"> <li>Director of Alchip's BVI incorporated subsidiary</li> <li>Director of the Company's sub-sub- subsidiary in Wuxi</li> <li>Director of the Company's sub-sub- subsidiary in Hefei</li> <li>Director of the Company's sub-sub- subsidiary in Jinan</li> <li>Director of the Company's sub-sub- subsidiary in Guangzhou</li> </ul>	None	None	None

Title	Nationality	Name	Gender	Date of Inauguration	Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement		Academic Qualifications & Major Experience	Position(s) Held Concurrently in any Other Company	With Spouse or Relative Within the Second Degree of Kinship who is a Managerial Officer		Remark
					Shares	Holding Percentage	Shares	Holding Percentage	Shares	Holding Percentage			Title	Name	
Financial Controller	R.O.C.	Nancy Chan	Female	09/18/2004	120,000	0.17%	0	0%	0	0%	<b>Academic qualifications:</b> <ul style="list-style-type: none"> <li>■ M.S. in Risk Management, University of Reading, U.K.</li> <li>■ B.S. in Accounting, National Taiwan University</li> </ul> <b>Work experience:</b> <ul style="list-style-type: none"> <li>■ Deputy Manager of Deloitte &amp; Touche</li> </ul>	<ul style="list-style-type: none"> <li>■ Director of Alchip's BVI incorporated subsidiary</li> </ul>	None	None	None
VP of Strategy Alliance	R.O.C.	Peter Teng	Male	03/15/2019	68,505	0.10%	0	0%	0	0%	<b>Academic qualifications:</b> <ul style="list-style-type: none"> <li>■ B.S. in Computer Science, University of Toronto</li> </ul> <b>Work experience:</b> <ul style="list-style-type: none"> <li>■ Sr. Director of Strategic Alliance of the Company</li> </ul>	None	None	None	None
Sr. VP of Business Development	R.O.C.	Dave Hwang (Note 1)	Male	03/05/2021	0	0.00%	0	0%	0	0%	<b>Academic qualifications:</b> <ul style="list-style-type: none"> <li>■ Ph.D. in Materials Science and Engineering, North Carolina State</li> <li>■ MS., Virginia Tech</li> </ul> <b>Work experience:</b> <ul style="list-style-type: none"> <li>■ Senior Manager of TSMC Marketing and Business Development Division</li> <li>■ Sales and Marketing Vice President of GUC</li> </ul>	None	None	None	None

Note 1 : Mr. Dave Hwang became an executive of the Company on March 5, 2021.

### 3.2.3 Remuneration of Directors, Supervisors, General Managers and Vice Presidents in the most recent year

#### A. Remuneration of Directors

December 31, 2020; Unit : NTS thousand

Title	Name	Director's Remuneration				Compensation Received by Directors Who are Also Employees			Ratio of Total Compensation (A+B+C+D+E+F+G) to Net Income (%)		Compensation Paid to Directors from an Invested Company Other than the Company's Subsidiary or the Parent company												
		Base Compensation (A)	Severance Pay (B)	Compensation to Directors (C) (Note 1)	Allowances (D)	Ratio of Total Remuneration (A+B+C+D) to Net Income (%)	Salary, Bonuses, and Allowances (E)	Severance Pay (F)	Compensation (G)	The company		Companies in the consolidated financial statements											
Chairman	Kinying Kwan																						
Director	Herbert Chang																						
Director	Johnny Shyang-Lin Shen																						
Director	Daniel Wang	7,463	0	24,128	2,128	4.04%	54,788	103	0	0	0	0	10.61%	10.61%								N/A	
Independent Director	Mao-Wei Hung																						
Independent Director	Brian Chiang																						
Independent Director	Binfu Chuang																						

1. Please describe the policy, system, standard and structure of remuneration paid for Individual Director and also describe the relevance between the responsibility, risk and engaged time of Individual Director...etc. and the amount of remuneration: The remuneration paid for directors of the Company is set aside no more than 2% of its annual profits as bonus to Directors according to the Memorandum and Articles of Association of the Company. The remuneration paid as allowances to Directors is approved by the Board and paid monthly.

2. Except the above table, the remuneration gained by the Directors of Company for the service provided to all companies is stated in financial report in the most recent year : None.

Note 1 : On March 5, 2021, the Board of the Company approved that compensation distribution to directors is NT\$24,128 thousand.

Range of Remuneration	Name of Directors					
	Total of (A+B+C+D)		Total of (A+B+C+D+E+F+G)			
	The Company	Companies in the Consolidated Financial Statements	The Company	Companies in the Consolidated Financial Statements	The Company	Companies in the Consolidated Financial Statements
Under NT\$ 1,000,000	-	-	-	-	-	-
NT\$1,000,000 (inclusive) ~ NT\$2,000,000 (exclusive)	-	-	-	-	-	-
NT\$2,000,000 (inclusive) ~ NT\$3,500,000 (exclusive)	Johnny Shyang-Lin Shen, Daniel Wang	Johnny Shyang-Lin Shen, Daniel Wang	-	-	-	-
NT\$3,500,000 (inclusive) ~ NT\$5,000,000 (exclusive)	Herbert Chang, Mao-Wei Hung, Brian Chiang, Binfu Chuang	Herbert Chang, Mao-Wei Hung, Brian Chiang, Binfu Chuang	Herbert Chang, Mao-Wei Hung, Brian Chiang, Binfu Chuang	Herbert Chang, Mao-Wei Hung, Brian Chiang, Binfu Chuang	-	Herbert Chang, Mao-Wei Hung, Brian Chiang, Binfu Chuang
NT\$5,000,000 (inclusive) ~ NT\$10,000,000 (exclusive)	-	-	-	-	-	-
NT\$10,000,000 (inclusive) ~ NT\$15,000,000 (exclusive)	Kinying Kwan	Kinying Kwan	Kinying Kwan	Kinying Kwan	Kinying Kwan	Kinying Kwan
NT\$15,000,000 (inclusive) ~ NT\$30,000,000 (exclusive)	-	-	-	-	-	-
NT\$30,000,000 (inclusive) ~ NT\$50,000,000 (exclusive)	-	-	-	-	-	-
NT\$50,000,000 (inclusive) ~ NT\$100,000,000 (exclusive)	-	-	-	-	-	-
Over NT\$100,000,000	-	-	-	-	-	-
Total	7	7	7	7	7	7

**B. Remuneration to Supervisors:** It is not applicable as the Company does not have supervisors.

**C. Remuneration to General Managers and Vice Presidents**

December 31, 2020; Unit : NT\$ thousand

Title	Name	Salary(A)		Severance Pay and Pensions (B)		Bonuses and Allowance (C)		Employees' Compensation (D)				Ratio of total compensation (A+B+C+D) to net income after tax(%)		Compensation Received from Non-consolidated subsidiary
		The Company	Companies in the Consolidated Financial Statements	The Company	Companies in the Consolidated Financial Statements	The Company	Companies in the Consolidated Financial Statements	The Company	Cash	Stock	The Company	Companies in the Consolidated Financial Statements		
CEO	Johnny Shyang-Lin Shen	157,743	157,743	685	685	0	0	0	0	0	0	18.98%	18.98%	N/A
GM of Japan Business Unit	Junichiro Hosaka													
GM of China Business Unit	Andy Lin													
GM of US Business Unit	Hiroyuki Nagashima													
Sr. VP of Design Engineering	Leo Cheng													
Sales VP	Robert Chang													
CFO	Daniel Wang													
Financial Controller	Nancy Chan													
VP of Strategy Alliance	Peter Teng													



### Remuneration Scale Table

Remuneration Scale to the Company's General Managers and VPs	Name of General Managers and VPs	
	The company	Companies in the Consolidated Financial Statements
Under NT\$ 1,000,000	-	-
NT\$1,000,000 (inclusive) ~ NT\$2,000,000 (exclusive)	--	--
NT\$2,000,000 (inclusive) ~ NT\$3,500,000 (exclusive)	--	--
NT\$3,500,000 (inclusive) ~ NT\$5,000,000 (exclusive)	-	-
NT\$5,000,000 (inclusive) ~ NT\$10,000,000 (exclusive)	Junichiro Hosaka	Junichiro Hosaka
NT\$10,000,000 (inclusive) ~ NT\$15,000,000 (exclusive)	Hiroyuki Nagashima , Andy Lin, Nancy Chan	Hiroyuki Nagashima , Andy Lin, Nancy Chan
NT\$15,000,000 (inclusive) ~ NT\$30,000,000 (exclusive)	Daniel Wang , Robert Chang , Leo Cheng , Peter Teng	Daniel Wang , Robert Chang , Leo Cheng , Peter Teng
NT\$30,000,000 (inclusive) ~ NT\$50,000,000 (exclusive)	Johnny Shyang-Lin Shen	Johnny Shyang-Lin Shen
NT\$50,000,000 (inclusive) ~ NT\$100,000,000 (exclusive)	-	-
Over NT\$100,000,000	-	-
Total	9	9

**D. Employees' bonus paid to Managerial Officers**

December 31, 2020; Unit: NT\$ thousand

	Title	Name	Stock Dividend(Note1)	Cash Dividend(Note1)	Total	Percentage of the Total Amount to the Net Income After Tax (%)
Executive Officers	CEO	Johnny Shyang-Lin Shen				
	GM of Japan Business Unit	Junichiro Hosaka				
	GM of China	Andy Lin				
	GM of US Business Unit	Hiroyuki Nagashima				
	Sr. VP of Design Engineering	Leo Cheng	0	0	0	0%
	Sales VP	Robert Chang				
	CFO	Daniel Wang				
	Financial Controller	Nancy Chan				
	VP of Strategy Alliance	Peter Teng				

**3.2.4 Comparison of the remunerations to Directors, General Managers, and VPs in proportion to the net income after tax from the Company and companies included in the consolidated financial statements in the most recent 2 years, and specify the policies, standards, combinations, procedures for determining remunerations and correlation with business performance**

**A. The ratio of total remuneration paid by the Company and by all companies included in the consolidated financial statements for the two most recent years to Directors, General Managers, and VPs of the Company to the net income**

Title	Ratio of the Total Remuneration Amount to the Net Income After Tax (%)			
	2019		2020	
	The Company	Companies in the Consolidated Financial Statements	The Company	Companies in the Consolidated Financial Statements
Directors	5.07%	5.07%	4.04%	4.04%
GMs, and VPs	27.21%	27.21%	18.98%	18.98%

**B. The policies, standards, and portfolios for the payment of remuneration, the procedures for determining remuneration, and the correlation with business performance**

- (1) Remuneration to Directors are determined by the position at the Company, participation and contribution.
- (2) Remuneration to General Managers and VPs are determined according to the Company's regulations and HR policies, while taking into account each individual's position, performance and contribution, and industry standards.

### 3.3 Implementation Status of Corporate Governance

#### 3.3.1 Operations of the Board

A total of six (A) meetings of the Board of Directors were held in 2020 and the current year up to the date of publication of the annual report with their attendance shown as follows.

Title	Name	Attendance in Person (B)	By Proxy	Attendance Rate (%) 【B/A】	Remarks
Chairman	Kinying Kwan	6	0	100%	
Director	Herbert Chang	6	0	100%	
Director	Johnny Shyang-Lin Shen	6	0	100%	
Director	Daniel Wang	6	0	100%	
Independent Director	Mao-Wei Hung	6	0	100%	
Independent Director	Brian Chiang	6	0	100%	
Independent Director	Binfu Chuang	6	0	100%	

Other mentionable items :

1. The operation of the Board with any of the following conditions, the date of Board meeting, term, agenda items, all opinions of Independent Directors, and how the company handles opinions of Independent Directors should be stated clearly :

(1) For matters specified in Article 14-3 of the Securities Exchange Act.

Date of Board meeting	Term	Agenda items	Opinions of from Independent Directors	The Company's Conduct for the opinions of Independent Directors
03/06/2020	The 1 <sup>st</sup> in 2020	<ul style="list-style-type: none"> <li>The evaluation of Certified Public Accountant was approved.</li> <li>The bonus scheme for the employees and Directors for the year of 2019 was approved.</li> <li>The amendments to the "Memorandum and Articles of Association of the Company" was approved.</li> <li>The amendments to the "Management of the procedures for preparation of financial statements" was approved.</li> </ul>	None	None

		<ul style="list-style-type: none"> <li>The remuneration packages for the senior managers (executives) for the year of 2020 was approved.</li> <li>The grant list of 2019 Employee Stock Option Plan was approved.</li> <li>2020 Employee Stock Option Plan was approved.</li> </ul>		
04/30/2020	The 2 <sup>nd</sup> in 2020	<ul style="list-style-type: none"> <li>The establishment of a subsidiary in Guangzhou, China through Hong Kong subsidiary be approved.</li> <li>The subsequently ratification for the amendments of 2020 Employee Stock Option Plan was approved.</li> <li>The grant list of 2020 Employee Stock Option Plan was approved.</li> </ul>	None	None
07/31/2020	The 3 <sup>rd</sup> in 2020	<ul style="list-style-type: none"> <li>The grant list of 2020 Employee Stock Option Plan was approved.</li> </ul>	None	None
10/30/2020	The 4 <sup>th</sup> in 2020	<ul style="list-style-type: none"> <li>The evaluation of Certified Public Accountant was approved.</li> <li>The grant list of 2020 Employee Stock Option Plan was approved.</li> <li>The Investment Plan and Assessment Report of ASICLAND Co., Ltd. was approved.</li> <li>The Investment Assessment Report of Kunqiao (Shenzhen) Semiconductor Fund was approved.</li> <li>The proposed financing of the Company through the issuance of GDR was approved.</li> </ul>	None	None
12/18/2020	The 5 <sup>th</sup> in 2020	<ul style="list-style-type: none"> <li>The detail for the issuance of new common shares by cash capital increase for sponsoring GDR issuance was approved.</li> <li>The change of Certified Public Accountant was approved.</li> <li>The evaluation of Certified Public Accountant was approved.</li> </ul>	None	None
03/05/2021	The 1 <sup>st</sup> in 2021	<ul style="list-style-type: none"> <li>The bonus scheme for the employees and Directors for the year of 2020 was approved.</li> <li>The amendments to the “Memorandum and Articles of Association of the Company” was approved.</li> </ul>	None	None

		<ul style="list-style-type: none"> <li>• The remuneration packages for the senior managers (executives) for the year of 2021 was approved.</li> <li>• The grant list of 2020 Employee Stock Option Plan was approved.</li> <li>• 2021 Employee Stock Option Plan was approved.</li> <li>• The prohibition on Directors to be released from Participation in Competitive Business was approved and adopted.</li> </ul>		
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(2) Except the former item, other Board resolutions where Independent Directors have expressed opposition or qualified opinions that have been noted in the record or declared in writing.

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 : Director, Johnny Shyang-Lin Shen and Director, Daniel Wang did not participate in the meeting of the Board of Directors held on March 6, 2020 and March 5, 2021 for discussion and voting on bonuses paid to Executives due to avoidance of conflict of interest.

3. The information of the Evaluation cycles, evaluation periods, scope and method of evaluation for the Self-evaluation(or Peer evaluation) of the Board of Directors:

Evaluation cycles	Evaluation periods	Scope of Evaluation	Method of Evaluation	Content of Evaluation
Once a year	1/1/2020~ 12/31/2020	The Board and each board member	The evaluation of the board as a whole and Self-evaluation of Board members	The evaluation was completed by the end of first quarter of 2021. The criteria for the evaluation of the board as a whole covers Participation in the operation of the company; Improvement of the quality of the board of directors' decision making; Composition and structure of the board of directors; Election and continuing education of the directors; and Internal control. Moreover, the criteria for the self-evaluation of board members covers Alignment of the goals and missions of the company; Awareness of the duties of a director; Participation in the operation of the company; Management of internal relationship and communication; The director's professionalism and continuing education; and Internal control. The results for the evaluations are both between 5 (Strongly agree) and 4

(Agree). The board members all agree the operation of board was good.

4. Measures taken to strengthen the functions of the Board (such as the establishment of audit committee,enhancement on information transparency) during the current year and past year and evaluation of measures :

The Audit Committee and Remuneration Committee were established on Oct. 29, 2010 and May 18, 2011 respectively and have assisted the Board in fulfilling its responsibilities in accordance with the Audit Committee Charter and Remuneration Committee Charter.

In order to improve the operation efficiency of the board of directors, we have established “Regulations Governing the Board Performance Evaluation” in March 6, 2020 to enhance the company’s board functions.

5. The attendance of Independent Directors

◎:Attend in Person; ☆:Proxy; \* :Absent

Term Name	The 1 <sup>st</sup> in 2020	The 2 <sup>nd</sup> in 2020	The 3 <sup>rd</sup> in 2020	The 4 <sup>th</sup> in 2020	The 5 <sup>th</sup> in 2020	The 1 <sup>st</sup> in 2021
Mao-Wei Hung	◎	◎	◎	◎	◎	◎
Brian Chiang	◎	◎	◎	◎	◎	◎
Binfu Chuang	◎	◎	◎	◎	◎	◎

### 3.3.2 Operation of Audit Committee

A total of six (A) Audit Committee meetings were held in 2020 and the current year up to the date of publication of the annual report. Records of attendance by independent directors are shown as follows :

Title	Name	Attendance in Person (B)	By Proxy	Attendance Rate (%) 【 B/A 】	Remarks
Independent Director	Mao-Wei Hung	6	0	100%	
Independent Director	Brian Chiang	6	0	100%	
Independent Director	Binfu Chuang	6	0	100%	

Other mentionable items :

- The main function of the Committee is to supervise the following matters :
  - (1)The reliability and integrity of the financial report of the Company.
  - (2)Appointment(and dismissal), independence and performance of certified public accountants of the Company.
  - (3)The effective implementation of the internal control system of the Company.
  - (4)Compliance with relevant laws and regulations of the Company.
  - (5)Management of the existing or potential risks of the Company.
- The operation of the Audit Committee with any of the following conditions, the dates of meetings, sessions, contents of motion, resolutions of the Audit Committee and the company’s response to the Audit Committee’s opinion should be specified :
  - (1) For matters specified in Article 14-5 of the Securities and Exchange Act.

Date of Board meeting	Term	Contents of Motion	Resolutions of Audit Committee	The conduct of the Company for the comments from Audit Committee
03/06/2020	The 1 <sup>st</sup> in 2020	<ul style="list-style-type: none"> <li>• The evaluation of Certified Public Accountant was approved.</li> <li>• The consolidated financial statement for the year ended December 31, 2019 of the Company was approved</li> <li>• The proposal of 2019 Dividend Distribution was approved.</li> <li>• The business report of 2019 was approved.</li> <li>• The Internal Control System Statement for the year ended December 31, 2019 of the Company was approved.</li> <li>• The amendments to the “Memorandum and Articles of Association of the Company” was approved.</li> <li>• The amendments to the “Rules Governing Procedures for Meetings of Board of Director” was approved.</li> <li>• The amendments to the “Rules of Responsibilities of Independent Directors” was approved.</li> <li>• The amendments to the “Management of the procedures for preparation of financial statements” was approved.</li> </ul>	They were approved by Audit Committee.	None.
04/30/2020	The 2 <sup>nd</sup> in 2020	<ul style="list-style-type: none"> <li>• The consolidated financial statements for the period</li> </ul>	They were approved by Audit Committee.	None



		<p>ended March 31, 2020 of the Company was approved.</p> <ul style="list-style-type: none"> <li>• The establishment of a subsidiary in Guangzhou, China through Hong Kong subsidiary was approved.</li> </ul>		
07/30/2020	The 3 <sup>rd</sup> in 2020	<ul style="list-style-type: none"> <li>• The semi-annual consolidated financial statement for the period ended June 30, 2020 of the Company was approved.</li> </ul>	It was approved by Audit Committee.	None
10/30/2020	The 4 <sup>th</sup> in 2020	<ul style="list-style-type: none"> <li>• The consolidated financial statements for the period ended September 30, 2020 of the Company was approved.</li> <li>• The evaluation of Certified Public Accountant was approved.</li> <li>• The Audit Plan for the year of 2021 of the Company was approved.</li> <li>• The investment Plan and Assessment Report of ASICLAND Co., Ltd. was approved.</li> <li>• The Investment Assessment Report of Kunqiao (Shenzhen) Semiconductor Fund was approved.</li> <li>• The proposed financing of the Company through the issuance of GDR was approved.</li> </ul>	They were approved by Audit Committee.	None
12/18/2020	The 5 <sup>th</sup> in 2020	<ul style="list-style-type: none"> <li>• The detail for the issuance of new common shares by cash capital increase for sponsoring GDR issuance was approved.</li> <li>• The change of Certified Public Accountant was approved.</li> <li>• The evaluation of Certified Public Accountant was approved.</li> </ul>	They were approved by Audit Committee.	None

03/05/2021	The 1 <sup>st</sup> in 2021	<ul style="list-style-type: none"> <li>• The consolidated financial statement for the year ended December 31, 2020 of the Company was approved</li> <li>• The proposal of 2020 Dividend Distribution was approved.</li> <li>• The business report of 2020 was approved.</li> <li>• The Internal Control System Statement for the year ended December 31, 2020 of the Company was approved.</li> <li>• The amendments to the “Memorandum and Articles of Association of the Company” was approved.</li> <li>• The amendments to the Rules Governing Procedures for Meetings of Board of Director was approved.</li> <li>• 2021 Employee Stock Option Plan was approved.</li> </ul>	They were approved by Audit Committee.	None.
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(2) Except the former item, other resolutions which were not approved by the Audit Committee but were approved by two thirds or more of all directors : None.

3. If there are Independent Directors’ avoidance of motions in conflict of interest, the Directors’ names, contents of motion, causes for avoidance and voting should be specified : None.

4. Communication between Independent Directors and Internal Auditors and Accounts (including major items, methods, and results that were communicated concerning the company’s financial and business situations) :

The Internal Auditor submits the Internal Audit Report to each Independent Director monthly for review and reports in Board meeting quarterly for the audit operations and the implementation status. If there are any special circumstances, the Internal Auditors will immediately notify the audit committee.

Date	Communication material	Result of Communication
April 30, 2020 Audit Committee	2020 Q1 Audit report	The communication between Independent Director and Internal Auditor is well.
July 31, 2020 Audit Committee	2020 Q2 Audit report	The communication between Independent Director and Internal Auditor is well.
Oct. 30, 2020 Audit Committee	2020 Q3 Audit report	The communication between Independent Director and Internal Auditor is well.
March 5, 2021 Audit Committee	2020 Q4 Audit report	The communication between Independent Director and Internal Auditor is well.

The Company's Certified Public Accountant reported the audit results on 2020 financial statements and other communication matters required by relevant laws and regulations in the meeting of the audit committee on March 5, 2021. The communication between the Audit Committee and the CPAs has been good.

Date	Communication material	Result of Communication
March 6, 2020	1. Reported the audit result for 2019 financial statements and had discussion for the adoption of accounting principal and the influence of the updated regulations. 2. Reported the Internal audit result.	The communication between Independent Directors and CPAs was well.
March 5, 2021	1. Reported the audit result for 2020 financial statements and had discussion for the adoption of accounting principal and the influence of the updated regulations. 2. Reported the Internal audit result.	The communication between Independent Directors and CPAs was well.

**3.3.3 Corporate governance implementation status and deviations from the “Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies” and the reason for any such deviation**

Item	Implementation Status		Deviations from the “Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	
I. Does the company establish and disclose the Corporate Governance Best Practice Principles based on “Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies”?	V		No material difference.
II. Shareholding Structure & Shareholders’ rights			
1. Does the company have an Internal Operation procedures for appropriate handling shareholders’ suggestions, inquiries, disputes and litigation matters, and implement them in accordance with the procedures?	V		No material difference.
2. Does the company possess a list of major shareholders and beneficial owner of these major shareholders?	V		No material difference.
3. Has the company built and executed a risk management system and firewall between the Company and its affiliates?	V		No material difference.

Item	Implementation Status		Deviations from the “Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies” and Reasons
	Yes	No	
4. Has the company establish internal rules prohibiting insiders trading on undisclosed information?	V	<p>risk control and firewalls mechanism through the internal audit system.</p> <p>4. The Company has formulated the “Procedures for Internal Material Information Handling and the Prevention of Insider Trading” and regularly provided training or relevant information on this issue to the insiders.</p>	No material difference.
<p>III. Composition and Responsibilities of the Board of Directors</p> <p>1. Has the company established a diversification policy for the composition of its Board of Directors and has it been implemented accordingly?</p>	V	<p>1. The Board consists of seven directors, in which three of them are Independent Directors as adopted in accordance with the “Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies”. The Company has stated the diversification policy for composition of the Board members in Corporate Governance Best Practice Principles and adopted the policy. To achieve the better corporate governance, each Board member has his own specialized field and knowledge of industry. The specific goal for the diversification policy on the Board members of the Company and the achievement in 2020 are stated below. (1) Basic requirements and values: The board members are all Taiwanese, and three of them are also U.S. citizen. There is no female in the board of the Company currently. In order to achieve the goal of diversity, the female board director will be considered when the re-election of board is taken for the gender equality. (2) Professional knowledge and skills: It will be the best practice when the board members have the financial,</p>	No material difference.

Item	Implementation Status		Deviations from the “Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies” and Reasons																																																														
	Yes	No																																																															
<p>2. Other than the Remuneration Committee and the Audit Committee which are required by law, does the Company plan to set up other Board committees?</p> <p>3. Does the company establish methodology for evaluating the performance of its Board Directors, on an annual basis and submit the results of performance</p>	V	<p>accounting, management and industry background. The board members of the Company all have the required professional knowledge and skills. The items of diversity in the board members of the Company are shown as follows: The industry experience and professional distribution of the directors are shown as follows:</p> <table border="1"> <thead> <tr> <th rowspan="2">Name</th> <th colspan="6">Item of Diversity</th> </tr> <tr> <th>Nationality</th> <th>Management</th> <th>Leadership</th> <th>Industry</th> <th>Finance</th> <th></th> </tr> </thead> <tbody> <tr> <td>Kinying Kwan</td> <td>U.S.A , R.O.C</td> <td>V</td> <td>V</td> <td>V</td> <td></td> <td></td> </tr> <tr> <td>Herbert Chang</td> <td>R.O.C</td> <td>V</td> <td>V</td> <td>V</td> <td></td> <td></td> </tr> <tr> <td>Johnny Shiyang-Lin Shen</td> <td>U.S.A , R.O.C</td> <td>V</td> <td>V</td> <td>V</td> <td></td> <td></td> </tr> <tr> <td>Daniel Wang</td> <td>R.O.C</td> <td>V</td> <td>V</td> <td>V</td> <td>V</td> <td></td> </tr> <tr> <td>Mao-Wei Hung</td> <td>R.O.C</td> <td>V</td> <td>V</td> <td></td> <td>V</td> <td></td> </tr> <tr> <td>Brian Chiang</td> <td>R.O.C</td> <td>V</td> <td>V</td> <td>V</td> <td></td> <td></td> </tr> <tr> <td>Binfu Chuang</td> <td>U.S.A , R.O.C</td> <td>V</td> <td>V</td> <td>V</td> <td></td> <td></td> </tr> </tbody> </table> <p>2. Other various functional committees have not been set up under the law by the Company in addition to the remuneration committee and audit committee.</p> <p>3. The Board of the Company always conducts the matters in accordance with the “Regulations Governing Procedure for Board of Directors Meetings of Public Companies”.Moreover, the</p>	Name	Item of Diversity						Nationality	Management	Leadership	Industry	Finance		Kinying Kwan	U.S.A , R.O.C	V	V	V			Herbert Chang	R.O.C	V	V	V			Johnny Shiyang-Lin Shen	U.S.A , R.O.C	V	V	V			Daniel Wang	R.O.C	V	V	V	V		Mao-Wei Hung	R.O.C	V	V		V		Brian Chiang	R.O.C	V	V	V			Binfu Chuang	U.S.A , R.O.C	V	V	V			<p>The Company has not set up other various functional committees.</p> <p>No material difference.</p>
Name	Item of Diversity																																																																
	Nationality	Management	Leadership	Industry	Finance																																																												
Kinying Kwan	U.S.A , R.O.C	V	V	V																																																													
Herbert Chang	R.O.C	V	V	V																																																													
Johnny Shiyang-Lin Shen	U.S.A , R.O.C	V	V	V																																																													
Daniel Wang	R.O.C	V	V	V	V																																																												
Mao-Wei Hung	R.O.C	V	V		V																																																												
Brian Chiang	R.O.C	V	V	V																																																													
Binfu Chuang	U.S.A , R.O.C	V	V	V																																																													

Item	Implementation Status		Deviations from the “Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies” and Reasons
	Yes	No	
<p>assessments to the Board of Directors and use them as reference in determining compensation for individual Directors, their nomination and additional office term.?</p> <p>4. Does the company regularly evaluate its independence of CPAs?</p>	V		No material difference.
<p>IV. Does the company an adequate number of corporate governance personnel with appropriate qualifications and appoint a chief corporate governance officer to be in charge of corporate governance affairs (including but not limited to furnish information required for business execution by directors and supervisors, assisting directors and supervisors with legal compliance, handle matters relating to board meetings and shareholders meetings according to laws)?</p> <p>V. Has the company established a means of communicating with its stakeholders (including but not limited to shareholders, employees, customers and</p>	V	<p>Company has established regulations governing the Board performance evaluation on March 6, 2020 and conducted the performance evaluation and submitted the result to the Board by the end of first quarter of 2021.</p> <p>4.The Company’s Audit Committee and Board of Directors annually evaluate the independence, competence, and professionalism of CPAs and required CPAs to present the “Statement of Independence”. The Company ensures that the accountants have no other financial interests and business relationship with the Company except certification fee and case expenses on finance or taxation. When the Board of the Company discusses and appoints CPAs, each accountant’s personal resume and Statement of Independence (not in violation of the No. 10 Bulletin of Norm of Professional Ethics for Certified Public Accountant of the Republic of China) are also presented for the Board to discuss and evaluate their independence.</p> <p>The Company has set up a part time corporate governance personnel to be in charge of corporate governance affairs.</p>	No material difference.
	V		No material difference.

Item	Implementation Status		Deviations from the “Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies” and Reasons
	Yes	No	
suppliers) or created a Stakeholders Section on its company website? Does the company respond to stakeholders’ questions on corporate responsibilities?		stakeholders and provide the channel for communication.	
VI.Has the company appointed a professional registrar for its Shareholders’ meetings?	V	The Company has appointed the Stock Affairs Agency of CTBC Bank as our registrar for our Shareholders’ meetings.	No material difference.
VII.Information disclosure			
1. Has the company set up a website to disclose information regarding its finances, operations, and corporate governance status?	V	1. The Company has set up a website in Chinese/English ( <a href="http://www.alchip.com">http://www.alchip.com</a> ) which discloses the information regarding Company’s finances, operations and corporate governance status. In addition, the Company also discloses the relevant information on the Market Observation Post System.	No material difference.
2. Does the company use other information disclosure channels (e.g. maintaining an English-language website, assigning staff to handle information collection and disclosure, appointing spokespersons, webcasting investors conference etc.)?	V	2. The Company has set up a website in English, assigned personnel exclusively to handle information collection and disclosure, such as the information of investor conference. The Company also established a spokesperson system as required by the regulations.	No material difference.
3. Does the company publish and report its annual financial report within two months after the end of a fiscal year, and publish and report its financial reports for the first, second and third quarters as well as its operating status for each month before the specified deadline?	V	3. The Company publishes and reports annual financial report within specified deadline and has no plan to publish and report financial report and operating status ahead of time.	No material difference.
VIII.Does the company have other information that would help better understand the Company’s implementation of corporate governance? (including but not limited to employee rights and benefits, employees caring, investor relations, supplier relationship, the rights of related parties, continuing education for directors and supervisors, implementation of risk management policies and risk assessment standards,	V	1. The Company has formulated and implemented relevant regulations in accordance with government acts regarding labor, welfare, safety, and health to protect employee rights and benefits and care employees’ life. 2. In accordance with applicable public company rules, the Company discloses the Company’s business operations and financial status for	No material difference.



Item	Implementation Status		Deviations from the “Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	
implementation of customer policies, liability insurance purchased by the Company directors and supervisors)?		<p>investors, and maintains investor relations by properly dealing with inquiries from investors.</p> <p>3. The Company arranges the training institutions specified by the competent authority to provide further training for Directors every year.</p> <p>4. The Company annually purchases D&amp;O Insurance for Directors and Independent Directors to reduce risks.</p>	
<p>IX. In terms of the corporate governance evaluation results which has been disclosed by the Corporate Governance Center of Taiwan Stock Exchange in the most recent year, describe the improved items and present the actions and amendment for unimproved items.</p> <p>1. Improved items : The Company has disclosed the operation of Remuneration Committee with the date of meeting, term, agenda items, resolutions, and how the company deals with opinions of Independent Directors in annual report.</p> <p>2. Remedy for unimproved items :</p> <p>i. The Company will disclose the English version of Material information on MOPS simultaneously from Year 2021.</p>			

### 3.3.4 Composition, responsibilities and operations of the Remuneration Committee shall be disclosed if the company has a Remuneration Committee in place

The purpose of the Company's compensation committee is to assist the Board of Directors in implementation and evaluation of the Company's overall compensation and benefits policies and remuneration to managerial officers.

#### A. Information on members of Remuneration Committee

Identity	Name	Criteria	Meets One of the Following Professional Qualification Requirements, Together with at Least Five-year Work Experience			Independence Criteria (Note 1)										Number of Other Taiwanese Public Companies Concurrently Serving as a Member of the Remuneration Committee	Remarks		
			An Instructor or Higher Position in a Department of Commerce, Law, Finance, Accounting, or Other Academic Department Related to the Business Needs of the Company in a Public or Private Junior College, College or University	A Judge, Public Prosecutor, Attorney, Certified Public Accountant, or Other Professional or Technical Specialist Who has Passed a National Examination and Been Awarded a Certificate in a Profession Necessary for the Business of the Company	Has 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				
Convener	Mao-Wei Hung	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	
Committee Member	Brian Chiang				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	(Note 2)
Committee Member	Binfu Chuang				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	

Note 1 : Please tick the corresponding boxes if members have been any of the following during the two years prior to being elected or during the term of office.

- (1) Not an employee of the Company or any of its affiliates.
- (2) Not a director or supervisor of the Company or any of its affiliates. However, in cases where the person is an independent director of the company, its parent company, or any subsidiary, or the subsidiary which belongs to the same parent company as appointed in accordance with the Act or with the laws of the country of the parent or subsidiary, it does not apply.
- (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) Not a spouse, relative within the second degree of kinship, or lineal relative within the third degree of kinship, of any of the persons in the preceding three subparagraphs.
- (5) Not a director, supervisor, or employee of a corporate shareholder that directly holds 5% or more of the total number of outstanding shares of the Company or that holds shares ranking in the top five in holdings or the representative who is appointed based on 1 or 2 in Article 27 of the Company Act (However, in cases where the person is an independent director of the company, its parent company, or any subsidiary, or the subsidiary which belongs to the same parent company as appointed in accordance with the Act or with the laws of the country of the parent or subsidiary, it does not apply).
- (6) Not a director, supervisor or employee of other company controlled by the same person when more than half of the company's director seat or voting shares (However, in cases where the person is an independent director of the company, its parent company, or any subsidiary, or the subsidiary which belongs to the same parent company as appointed in accordance with the Act or with the laws of the country of the parent or subsidiary, it does not apply).
- (7) Not a director, supervisor or employee of other companies or institutions who is the same person or spouse with the company's chairman, General Manager or equivalent (However, in cases where the person is an independent director of the company, its parent company, or any subsidiary, or the subsidiary which belongs to the same parent company as appointed in accordance with the Act or with the laws of the country of the parent or subsidiary, it does not apply).

- (8) Not a director, supervisor, managerial officer, or shareholder holding 5% or more of the share, of a specified company or institution that has a financial or business relationship with the Company. (However, if a specific company or institution holds more than 20% but not more than 50% if the total issued shares of the company, and the independent directors set by the company and its parent company, subsidiaries, or subsidiaries of the same parent company in accordance with this law or local laws and regulations.)
- (9) Not a professional individual who, or an owner, partner, director, supervisor, or managerial officer and their spouse of a sole proprietorship, partnership, company, or institution that, provides audit or business, legal, financial, accounting services or consultation to the Company or to any affiliate of the Company that have received cumulative remuneration which is not exceeding NT\$500,000 in past two years. Except for members of the remuneration committee, the public acquisition review committee or the special committee on mergers and acquisitions that perform their functions in accordance with the relevant laws of the Securities and Exchange Act or Business Mergers And Acquisitions Act.
- (10) Not been a person of any conditions defined in Article 30 of the Company Law.

Note 2 : The Committee shall faithfully perform the following duties and present its recommendations to the board of directors for discussion.

- (1) Periodically reviewing this Charter and making recommendations for amendments.
- (2) Establishing and periodically reviewing the annual and long-term performance goals for the directors, supervisors, and managerial officers of this Corporation and the policies, systems, standards, and structure for their compensation.
- (3) Periodically assessing the degree to which performance goals for the directors, supervisors, and managerial officers of this Corporation have been achieved, and setting the types and amounts of their individual compensation.

#### B. Operations of the Remuneration Committee

- (1) The Company's remuneration committee consists of three members.
- (2) The members' term of office for this session : From June 21, 2019 to June 20, 2022. Mr. Mao-Wei Hung, the remuneration committee chair convened the regular meeting two (2) times in Year 2020. The records of attendance of members are shown as follows :

Title	Name	Attendance in Person(B)	By Proxy	Actual Attendance Rate (%) (B/A)(Note)	Remarks
Convener	Mao-Wei Hung	2	0	100%	
Committee Member	Brian Chiang	2	0	100%	
Committee Member	Binfu Chuang	2	0	100%	

Other mentionable items :

##### 1. The resolutions of Remuneration Committee :

The date of Remuneration Committee	The Committee	Motions	Resolutions	The conduct of the Company for the comments from Audit Committee
03/06/2020	The 1 <sup>st</sup> in 2020	<ul style="list-style-type: none"> <li>• The bonus scheme for the employees and directors for the year of 2019.</li> <li>• The remuneration packages for the senior managers (executives) for the year of 2020.</li> </ul>	They were approved by Remuneration Committee	They were all submitted to Board and approved by Directors of Board

		<ul style="list-style-type: none"> <li>• The monthly remuneration scheme for the Directors for the year of 2020.</li> <li>• The “Regulations Governing the Board Performance Evaluation” of the Company, was approved.</li> <li>• The amendments to the “Remuneration Committee Charter” of the Company was adopted and approved.</li> <li>• The 2020 Employee Stock Option Plan was approved.</li> </ul>		
04/30/2020	The 2 <sup>nd</sup> in 2020	The grant list of 2020 Employee Stock Option Plan.	It was approved by Remuneration Committee	It was submitted to Board and approved by Directors of Board

2. If the Board of Directors declines to adopt, or modifies a recommendation of the remuneration committee, the date of board meeting, term, agenda items, results of resolutions of the remuneration committee, and how the company handles opinions of the remuneration committee should be stated clearly (If the remuneration approved by the Board of Directors is better than the recommendation of the remuneration committee, the difference and the reason should be stated clearly.) : No such situation occurred.
3. If resolutions of the remuneration committee are objected by members or become subject to a qualified opinion, which have been recorded or declared in writing, then the date of the meeting, the session, the nature of the motion, all members’ opinions and the response to members’ opinion should be specified : No such situation occurred.

### 3.3.5 Corporate social responsibility and Deviations from the “Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies” and Reasons

Systems and measures that the company has adopted with respect to environmental protection, community participation, contributions to society, services to society, social and public interests, consumer rights and interests, human rights, safety and health, and other corporate social responsibilities and activities, and the state of implementation.

Item	Status of Implementation		Deviations from the “Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	
I. Does the company, in its corporate management guidelines and business operations, give due consideration to the rights and interests of stakeholders and, while pursuing sustainable operations and profits, also give due consideration to the environment, society and corporate governance?	V		In fulfilling corporate social responsibility initiatives, the Company shall, in its corporate management and operations, give due consideration to the social morals and the rights and interest of the interested parties and, while pursuing sustainable operations and profits, also give due consideration to the environment, society and corporate governance.
II. Does the company establish an exclusively (or concurrently) dedicated unit to be in charge of proposing and enforcing the corporate social responsibility, have top management be authorized to handle it by the Board of Directors, and to report to the Board of Directors on a periodic basis?	V		The Company has a concurrently dedicated unit (HR) to be in charge of the promotion of corporate social responsibility, reports on the implementation to the CEO regularly, collects and reports the summary of implementation to the Board of Directors yearly.
III. Environmental issues 1. Does the company establish a proper environment management system based on the characteristics of its industry? 2. Does the company endeavor to utilize all resources more efficiently and use renewable materials that have a low impact on the environment?	V  V		 1. Since the Company has no industrial pollution, we focus on continuous promotion of environmental protection and energy conservation, and reduce sanitary waste to achieve the goal for energy conservation and carbon reduction. 2. The Company mainly provides customers with NRE. The solutions to the back-end mass production engineering are all through outsourcing, including wafer fabrication, packaging, and testing so that the

Item	Status of Implementation		Deviations from the “Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	
<p>3. Does the company evaluate the climate change on its the potential risk and chance for now and future and take action which is related to the issues of climate?</p> <p>4. Does the company count the emissions of greenhouse-gas, water consumption and total weight of wastewater in the past two years and set the policies for energy conservation and carbon reduction, greenhouse-gas reduction and water or other waste management?</p>	V		No material difference.
	V		No material difference.
<p>IV. Social issues</p> <p>1. Does the company adopt relevant management policies and processes in compliance with relevant laws and regulations, and the International Bill of Human Rights?</p> <p>2. Does the company set and implement a reasonable employee benefit plan (including remuneration, leaves and other benefits) and reflect the corporate business performance or achievements in the employee remuneration?</p> <p>3. Does the company provide safe and healthful work environments for its employees, organize training on safety, and health for its employees on a regular basis?</p> <p>4. Does the company establish effective training programs to foster career skills for its employees?</p>	V		No material difference.
	V		No material difference.
	V		No material difference.
	V		No material difference.

Item	Status of Implementation		Deviations from the “Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies” and Reasons
	Yes	No	
5. Does the company follow relevant laws, regulations, and international guidelines for the customer’s health and safety, customer’s privacy, marketing and labeling of its products and services and also establish relevant policies on consumer rights and interests and procedure for accepting consumer complaints? 6. Does the company establish the supplier Management Policy for asking the suppliers to follow the relevant regulations and practice in the issues of environmental protection, occupational safety and health or Labor rights?	V		5. The Company’s unit of Quality System has established “Procedures for Customer Satisfaction and Complaint” and set an avenue for complaint at the Stakeholders Section on the Company website to protect consumer rights and interests. 6. The Company assesses whether there is any record of a supplier’s impact on the environmental protection, occupational safety and health or Labor rights and has included such record in the supplier assessment. If the supplier violates the related regulations, the Company will give a warning and ask for improvement within a limited period of time, and those who are in serious circumstances will no longer cooperate.
V. Does the company prepare the corporate social responsibility report and disclose non-financial information by referring to the internationally-used governing preparation or guide ? Has the report disclosed been assured, verified or certified by a third party.		V	The Company deals with social responsibility related matters based on the “Corporate Social Responsibility Best Practice Principles”.
VI. If the company promulgates its own corporate social responsibility principles in accordance with the “Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies” , please state clearly the discrepancy in the operation thereof and the principles : The Company has established the “Corporate Social Responsibility Best Practice Principles” and followed such principles to handle relevant matters on the Company’s corporate social responsibility.			The Company does not prepare the corporate social responsibility report.
VII. Other significant information which would help better understand the implementation of corporate social responsibility (such as environmental protection, community participation, contribution to society, service to society, social and public interests, consumer rights and interests, human rights, safety and health, other corporate social responsibilities and activities, and the state of implementation. (1) The Company received Green Partner certification from a world-class company in 2008 as its partner in green supply chain. The Company continues to make efforts to provide excellent quality of environmentally friendly products and fulfills environmental responsibility as a citizen of the world. (2) The Company launches fundraising activities and donations of materials from time to time for socially disadvantaged minorities and objects affected.			

**3.3.6 Implementation of Ethical Corporate Management and Discrepancy from the “Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies” and Reasons : The Company has formulated the “Operational Procedures and Guidelines for Ethical Management” to foster a corporate culture of ethical management and sound development and offer to establish good commercial practices, and follow them to handle relevant matters**

Item	Status of Implementation		Discrepancy from the “Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies” and the Reasons
	Yes	No	
<p>I. Establishment of ethical corporate management policies and programs</p> <p>1. Does the company set the ethical management policy which has approved by the Board and clearly specify the ethical management policies, action in the rules and external documents of the Company and the commitment by the Board of Directors and Executives for implementing the policies actively?</p>	V		No material difference.
<p>2. Does the company establish a risk assessment mechanism against unethical conduct, analyze and assess on a regular basis business activities within the business scope which are at a higher risk of being involved in unethical conduct, and establish prevention programs and also adopt preventive measures which are at least included any matter set forth in Paragraph 2, Article 7 of the “Ethical Corporate Management Best Practice Operational Procedures and Action Guidebook”?</p>	V		The Company has not set a risk assessment mechanism against unethical conduct.
<p>3. Does the company set implementation procedures, guidelines, consequence of violation and complaint procedures in relevant policies which are duly enforced to prevent unethical conduct?</p>	V		No material difference.



Item	Status of Implementation		Discrepancy from the “Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies” and the Reasons
	Yes	No	
<p>II. Implementation of ethical management</p> <p>1. Does the company assess the ethics records of whom it has business relationship with and include business conduct and ethics related clauses in the business contracts?</p> <p>2. Does the company establish a dedicated unit that is under the Board of Directors and responsible for promoting the ethical management, and report its ethical management policy, the prevention programs for misconduct and the status of supervision to the Board of Directors on a regular basis(at least once a year)?</p>	V		<p>No material difference.</p> <p>The Company reports to the Board aperiodically.</p>

Item	Status of Implementation		Discrepancy from the “Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies” and the Reasons
	Yes	No	
3. Does the company adopt policies for preventing conflicts of interest, offer appropriate means, and carry them out?	V		3. The Company has clearly stated in the “Ethical Corporate Management Best Practice Operational Procedures and Action Guidebook” that when a Director has a stake in a proposal at the meeting, that Director shall state the important aspects of the stake in the meeting and, where there is a likelihood that the interests of this Corporation would be prejudiced, may not participate in the discussion or vote on that proposal. If a personnel of the Company discovers that a potential conflict of interest exists involving himself/herself and the company that he/she represents when conducting the Company business, the personnel shall report the relevant matters to both her or his immediate supervisor and the Audit Dept., and the immediate supervisor shall provide the personnel with proper instructions.
4. Does the company establish effective accounting systems and internal control systems to facilitate ethical corporate management, and have the internal audit unit to set the related audit plan based on the assessment result of misconduct’s risk and then examine the situation of compliance for preventing the case of unethical conduct or have a certified public accountant to carry out the audit?	V		4. The Company’s accounting system is established referring to applicable laws and regulations the Company Act, Securities Exchange Act, Regulations Governing the Preparation of Financial Reports by Securities Issuers, International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), and Interpretations developed by the International Financial Reporting Interpretations Committee (IFRIC) or the former Standing Interpretations Committee (SIC), as recognized by the Financial Supervisory Commission (FSC) and the Company’s actual business situations. The Company’s internal control has established and executed according to the Regulations Governing Establishment of Internal Control Systems by Public Companies. The Internal Auditor formulates annual

Item	Status of Implementation		Discrepancy from the "Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies" and the Reasons
	Yes	No	
5.Does the company periodically organize training internally and externally on the ethical management?	V		audit plans and subsequently reports its audit findings and remedial issues to the Board and Management team on a regular basis. In addition, all departments and subsidiaries are also required to conduct Control Self-Assessment annually to review the effectiveness of the internal control system. 5. The Company periodically organizes training and awareness programs on the ethical management for employees.  No material difference.
III.State of implementation of the company's whistle - blowing system? 1.Does the company adopt a concrete whistle-blowing system and incentive measures, establish convenient whistle-blowing channels, and appoint appropriate dedicated personnel to handle whistle-blowing system?	V		1.The Company has established the "Reporting Regulations of Irregular, Immoral and Dishonest Conducts". The employee or any whistleblower can report through phone or E-mail (IR@alchip.com) with relevant evidence to the dedicated personnel. 2.The Company has established the "Reporting Regulations of Irregular, Immoral and Dishonest Conducts" which included a whistle-blowing system to protect personal information and privacy for related parties. 3.The Company adopts the confidentiality mechanism for whistle-blowers and prohibits from disclosure of any information related to whistle-blowers to protect whistle-blowers from inappropriate disciplinary actions due to their whistle-blowing.  No material difference.
2.Does the company adopt standard operating procedures for the investigation of reported misconduct, the follow-up after the investigation and relevant confidentiality mechanism? 3.Does the company adopt measures for protecting whistle-blowers from inappropriate disciplinary actions due to their whistle-blowing?	V		No material difference.  No material difference.
IV.Enhancing Disclosure of Information 1.Does the company disclose its ethical corporate management best practice principles and the effectiveness of promotion on the company website and the Market Observation Post System?	V		The Company has set up a website ( <a href="http://www.alchip.com">http://www.alchip.com</a> ) and continued to disclose the information regarding the latest financial statements, implementation of corporate governance, other statutory public disclosure, etc.  No material difference.

Item	Status of Implementation		Discrepancy from the “Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies” and the Reasons
	Yes	No	
V. If the company has established its own ethical corporate management policies in accordance with the “Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies” , please state clearly the discrepancy in the operation thereof and the principles : Details are shown as above.			
VI. Other significant information which would help better understand the implementation of ethical corporate management (such as the companies’ resolve and policies to advocate the ethical corporate management to business transaction suppliers, invitation to them to participate the training, review and improvement for adoption of the company’s own ethical corporate management best practice principles) : The Company always keeps a close eye on the development of relevant local and international regulations concerning ethical corporate management in order to ensure the Company’s “Ethical Corporate Management Best Practice Operational Procedures and Action Guidebook” is being kept progressed and up-to-date, aiming to enhance and achieve the Company’s better implement of ethical management.			

**3.3.7 If the company has adopted corporate governance best-practice principles or related bylaws, disclose the methods of inquiry for such principles or bylaws**

Principles or bylaws can be referred through the Market Observatory Post System.

**3.3.8 Other significant information that will provide a better understanding of the company's implementation of corporate governance, if any, such information may also be disclosed**

None.

**3.3.9 The section on the implementation of the company's internal control systems shall disclose as follows**

**A. A Statement on Internal Control :** Details are shown on pages 55 and 56.

**B. Where a CPA has been engaged to carry out a special audit of the internal control systems, disclose the CPA audit report :** None.

**3.3.10 The penalties delivered to the company and the staffs of the company, or the penalties delivered by the company to the staffs for violations of internal control system, if the shareholders' equity or the stock price of the company would be impacted by the penalties, the content of penalties, the major nonconformity, and the corrective action should be stated in the most recent years and up to the date of the annual report**

None.

**3.3.11 Major resolutions of Board Meetings and Shareholders' Meeting during the most recent year and the current year up to the date of publication of the annual report**

**A. Board Meeting :**

Date	Term	Major Resolutions
03/06/2020	The 1 <sup>st</sup> in 2020	<ol style="list-style-type: none"> <li>1. The evaluation of Certified Public Accountant was approved.</li> <li>2. The consolidated financial statement for the year ended December 31, 2019 of the Company was approved</li> <li>3. The proposal of 2019 Dividend Distribution was approved.</li> <li>4. The bonus scheme for the employees and Directors for the year of 2019 was approved.</li> <li>5. The business report of 2019 was approved.</li> <li>6. The Internal Control System Statement for the year ended December 31, 2019 of the Company was approved.</li> <li>7. The amendments to the "Memorandum and Articles of Association of the Company" was approved.</li> <li>8. The amendments to the "Corporate Social Responsibility Best Principles" was approved.</li> <li>9. The amendments to the "Ethical Corporate Management Best Practice Operational Procedures and Action Guidebook" was approved.</li> <li>10. The amendments to "Rules Governing the Procedures for Meetings of Shareholders" was approved.</li> <li>11. The "Regulations Governing the Board Performance Evaluation" was approved.</li> <li>12. The amendments to the "Rules Governing Procedures for Meetings of Board of Director" was approved.</li> <li>13. The amendments to "Corporate Governance Best-Practice Principles"</li> <li>14. The amendments to the "Audit Committee Charter" was approved.</li> <li>15. The amendments to the "Remuneration Committee Charter" was approved.</li> </ol>

		<ol style="list-style-type: none"> <li>16. The amendments to the “Regulations Governing Appointment of Independent Directors and Compliance Matters” was approved.</li> <li>17. The amendments to the “Rules of Responsibilities of Independent Directors” was approved.</li> <li>18. The amendments to the “Management of the procedures for preparation of financial statements” was approved.</li> <li>19. The remuneration packages for the senior managers (executives) for the year of 2020 was approved.</li> <li>20. The monthly remuneration scheme for the Directors for the year of 2020 was approved.</li> <li>21. The grant list of 2019 Employee Stock Option Plan was approved.</li> <li>22. 2020 Employee Stock Option Plan was approved.</li> <li>23. The date and meeting agenda of 2020 Annual General Meeting of the Company were approved.</li> <li>24. The period and place for shareholders who holding 1% or more of the total number of outstanding shares of the company to submit proposals to be discussed at the Annual General Meeting of the Company and submit the nomination of director candidates was approved.</li> </ol>
04/30/2020	The 2 <sup>nd</sup> in 2020	<ol style="list-style-type: none"> <li>1. The consolidated financial statements for the period ended March 31, 2020 of the Company was approved.</li> <li>2. The establishment of a subsidiary in Guangzhou, China through Hong Kong subsidiary was approved.</li> <li>3. The subsequently ratification for the amendments of 2020 Employee Stock Option Plan was approved.</li> <li>4. The grant list of 2020 Employee Stock Option Plan was approved.</li> </ol>
07/31/2020	The 3 <sup>rd</sup> in 2020	<ol style="list-style-type: none"> <li>1. The consolidated financial statement for the year ended June 30, 2020 of the Company was approved.</li> <li>2. The record date of distribution of cash dividend was approved.</li> <li>3. The grant list of 2020 Employee Stock Option Plan was approved.</li> </ol>
10/30/2020	The 4 <sup>th</sup> in 2020	<ol style="list-style-type: none"> <li>1. The consolidated financial statement for the year ended September 30, 2020 of the Company was approved.</li> <li>2. The evaluation of Certified Public Accountant was approved.</li> <li>3. The 2021 Audit Plan of the Company was approved.</li> <li>4. The grant list of 2020 Employee Stock Option was approved.</li> <li>5. The Investment Plan and Assessment Report of ASICLAND Co., Ltd. was approved.</li> <li>6. The Investment Assessment Report of Kunqiao (Shenzhen) Semiconductor Fund was approved.</li> <li>7. The proposed financing of the Company through the issuance of GDR was approved.</li> <li>8. The convening of 2020 Extraordinary Shareholders Meeting of the Company was approved.</li> </ol>
12/18/2020	The 5 <sup>th</sup> in 2020	<ol style="list-style-type: none"> <li>1. The detail for the issuance of new common shares by cash capital increase for sponsoring GDR issuance was approved.</li> <li>2. The change of Certified Public Accountant was approved.</li> <li>3. The evaluation and appointment of Certified Public Accountant was approved.</li> </ol>
03/05/2021	The 1 <sup>st</sup> in 2021	<ol style="list-style-type: none"> <li>1. The consolidated financial statement for the year ended December 31, 2020 of the Company was approved</li> <li>2. The proposal of 2020 Dividend Distribution was approved.</li> <li>3. The bonus scheme for the employees and Directors for the year of 2020 was approved.</li> <li>4. The business report of 2020 was approved.</li> <li>5. The Internal Control System Statement for the year ended December 31, 2020 of the Company was approved.</li> </ol>

		<ol style="list-style-type: none"> <li>6. The amendments to the “Memorandum and Articles of Association of the Company” was approved.</li> <li>7. The amendments to the “Rules Governing the Procedures for Meetings of Shareholders ” was approved.</li> <li>8. The amendments to the “Rules Governing Procedures for Meetings of Board of Director ” was approved.</li> <li>9. The appointment for senior manager (executive) of the Company was approved.</li> <li>10. The remuneration packages for the senior managers (executives) for the year of 2021 was approved.</li> <li>11. The monthly remuneration scheme for the Directors for the year of 2021 attached was approved.</li> <li>12. The grant list of 2020 Employee Stock Option Plan was approved.</li> <li>13. 2021 Employee Stock Option Plan was approved.</li> <li>14. The prohibition on Directors to be released from participation in competitive business was approved.</li> <li>15. The date and meeting agenda of 2021 Annual General Meeting of the Company were approved.</li> <li>16. The period and place for shareholders who holding 1% or more of the total number of outstanding shares of the company to submit proposals to be discussed at the Annual General Meeting of the Company and submit the nomination of director candidates was approved.</li> </ol>
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#### B. Shareholders’ Meeting :

Date	Major Resolutions	Implementation
06/11/2020	<ol style="list-style-type: none"> <li>1. 2019 Business Report and the Consolidated Financial Statements for the year ended December 31, 2019 of the Company.</li> <li>2. 2019 Dividend Distribution Proposal.</li> <li>3. Amendments to the Memorandum and Articles of Association of the Company.</li> <li>4. Amendments to the “Rules of Procedure for Shareholders Meetings of the Company”.</li> </ol>	<ol style="list-style-type: none"> <li>1. Approved and adopted.</li> <li>2. Approved. (1)The Company distributed 2019 dividend, US\$7,216,415 to shareholders of the Company. (2)The Record date was set on August 28, 2020 and the dividend distribution was completed on September 24, 2020.</li> <li>3. Approved and adopted.</li> <li>4. Approved and adopted.</li> </ol>
12/18/2020	The issuance of new common shares by cash capital increase for sponsoring GDR issuance.	Approved and adopted.

#### 3.3.12 Major issues of record or written statements made by any Director or Independent Directors dissenting to important resolutions passed by the Board of Directors during the most recent year and the current year up to the date of publication of the annual report

None.

**3.3.13 A summary of resignations and dismissals of persons connected with the company's financial report (including the chairman, General Manager, Chief Accounting Officer, Chief Financial Officer, Chief Internal Auditor, Chief Research and Development Officer, etc.) during the most recent year and the current year up to the date of the publication of the annual report**

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None.



### 3.4 Information on Company's Independent Auditors

#### 3.4.1 Auditor Informaiton

Accounting Firm	Name of CPA	Period Covered by CPA's Audit	Remarks
Deloitte & Touche	Yi-Wen Wang	2020	-
	Shih-Tsung Wu		

#### 3.4.2 Audit Fees

Unit: NT\$ thousand

Fee Range		Fee Items	Audit Fee	Non-audit Fee	Total
1	Under NT\$ 2,000,000		-	-	-
2	NT\$2,000,000(inclusive)~ NT\$4,000,000		-	-	-
3	NT\$4,000,000(inclusive)~ NT\$6,000,000		5,614	5,326	10,940
4	NT\$6,000,000(inclusive)~ NT\$8,000,000		-	-	-
5	NT\$8,000,000(inclusive)~NT\$10,000,000		-	-	-
6	Over NT\$100,000,000 (inclusive)		-	-	-

3.4.3 Non-audit fee paid to auditors, the audit firm and its affiliates accounted for more than one-fourth of total audit fee.

Unit: NT\$ thousand

Accounting Firm	Name of CPA	Audit Fee	Non-audit Fee					Period Covered by CPA's Audit	Remarks
			System of Design	Company Registration	Human Resources	Others	Subtotal		
Deloitte & Touche	Yi-Wen Wang	5,614	-	-	-	5,326	5,326	2020	(Note)
	Shih-Tsung Wu								

Note: Non-audit fee includes price transfer , tax return and GDSs offering

3.4.4. The company changes its accounting firm and the audit fees paid to new accounting firm was less than the payment of previous year : Not applicable.

3.4.5 Audit fees paid for the current year was less than 10 % of the previous year : Not applicable.

### 3.5 The Company's Chairman, Chief Executive Officer, Chief Financial Officer, and Managers in Charge of its Finance and Accounting Matters Has Held a Position at the Accounting Firm or its Affiliates in 2020

None.

### 3.6 Information on Change of Accountant

Due to relevant regulatory requirements on rotation, Deloitte & Touche has rotated audit partners for Alchip in 2020, Accountant Jamie Lee and Accountant Cheng-Ming Lee were replaced by Accountant Yi-Wen Wang and Accountant Shih-Tsung Wu.

### 3.7 Any Transfer, Pledge, or Other Change of Hands Involving the Equity Interests of a Director, Managerial Officer, or Shareholders Holding More Than 10% of the Shares of the Company during the Most Recent Year and the Current Year Up to the Date of the Publication of the Annual Report

#### 3.7.1 Change in equity interests by Directors, managerial officers, or major shareholders

Unit: Shares

Title	Name	2020		As of Apr. 13, 2021	
		Holding Increase (Decrease)	Pledged Holding Increase (Decrease)	Holding Increase (Decrease)	Pledged Holding Increase (Decrease)
Chairman	Kinying Kwan	(170,000)	0	(19,000)	0
Director	Herbert Chang	0	0	0	0
Director/ CEO	Johnny Shyang-Lin Shen	250,000	0	150,000	0
Director/ CFO	Daniel Wang	0	0	0	0
Independent Director	Mao Wei Hung	0	0	0	0
Independent Director	Brian Chiang	0	0	0	0
Independent Director	Binfu Chuang	0	0	0	0
GM of Japan Business Unit	Junichiro Hosaka	0	0	0	0
GM of US Business Unit	Hiroyuki Nagashima	0	0	0	0
GM of China Business Unit	Andy Lin	50,000 (32,000)	0	0	0
Sr. VP of Design Engineering	Leo Cheng	60,000	0	(9,000)	0
VP of Sales	Rober Chang	80,000	0	0	0
Financial Controller	Nancy Chan	22,500	0	60,000	0
VP of Strategic Alliance	Peter Teng	8,000	0	60,005	0
Sr. VP of Business Development	Dave Hwang (Note 1)	0	0	0	0
Shareholder Holding More Than 10% of the Shares of the Company	Morgan Stanley Co. International PLC (Note 2)	1,666,255 (1,055,000)	0	0	0

Note 1 : Mr. Dave Hwang became an executive on March 5, 2021.

Note 2 : On June 30, 2020, the shareholdings of Morgan Stanley Co. International PLC had exceeded 10% of the shares and on July 10, 2020 was less than 10% of the shares.

### 3.7.2 Information where the counterparty in any transfer of equity interests is a related party

None.

### 3.7.3 Information where the counterparty in any pledge of equity interests is a related party

None.

### 3.8 Relationship among the Top Ten Shareholders

Unit: shares

Name	Shareholding		Spouse's/minor's Shareholding		Shareholding by Nominee Arrangement		Relationship between any of the Company's Top Ten Share holders		Remarks
	Shares	%	Shares	%	Shares	%	Name	Relation	
GAOLING FUND, L.P.	3,182,000	4.53%	0	0	0	0	-	-	
PineBridge Global Funds - PineBridge Asia Ex Japan Small Cap Equity Fund(U8T8)	2,635,000	3.75%	0	0	0	0	-	-	
MITSUBISHI UFJ MORGSTAN SECURITIES CO., LTD.-EQUITY TRADING DIVISION (PROPRIETARY TRADING DESK)	2,404,000	3.42%	0	0	0	0	-	-	
BLACKROCK GLOBAL FUNDS - NEXT GENERATION TECHNOLOGY FUND	2,224,000	3.16%	0	0	0	0	-	-	
AIA International Limited-Relative Asia Equity HEF Portfolio	1,609,000	2.29%	0	0	0	0	-	-	
Johnny Shyang-Lin Shen	1,441,652	2.05%	0	0	0	0	-	-	
Standard Chartered Bank (Taiwan) Limited as custodian of Credit Suisse International	1,424,000	2.03%	0	0	0	0	-	-	
Allianz Global Investors Fund - Allianz Oriental Income(AD69)	1,300,000	1.85%	0	0	0	0	-	-	
Nomura Taiwan Superior Equity Fund	1,279,000	1.82%	0	0	0	0	-	-	
UPAMC GREAT CHINA Fund	987,000	1.40%	0	0	0	0	-	-	

### 3.9 Long-Term Investment Ownership

December 31, 2020;Unit: shares

Company Name	Investment by the Company		Investments Directly or Indirectly Controlled by Directors and Managers of the Company		Total Investment	
	Shares	%	Shares	%	Shares	%
Alchip Hong Kong	12,230,170,100	100	-	-	12,230,170,100	100
Alchip US	391,000,000	100	-	-	391,000,000	100
Alchip Japan	1,000	100	-	-	1,000	100
Alchip Taiwan	10,000	100	-	-	10,000	100
Alchip BVI	50,000	100	-	-	50,000	100
Alchip Shanghai	(Note)	100	-	-	(Note)	100
AlchipWuxi	(Note)	100	-	-	(Note)	100
Alchip Hefei	(Note)	100	-	-	(Note)	100
Alchip Jinan	(Note)	100	-	-	(Note)	100
Alchip Guangzhou	(Note)	100	-	-	(Note)	100

Note : Alchip(SH), Alchip(Wuxi) ,Alchip(Hefei) and Alchip(Jinan) are no shares issued.

Alchip Technologies, Limited  
Statement on Internal Control System

Date: March 5, 2021

Based on the results of self assessment of the internal control system conducted by the Company for the fiscal year 2020, we hereby declare as follows:

- I. The company acknowledges and understands that the establishment, enforcement and preservation of the internal control system are the responsibility of the Board, and that the company has already established such a system. The purpose is to provide reasonable assurance to the effectiveness and efficiency of business operations (including profitability, performance and security of assets), reliability, timeliness, transparency, and regulatory compliance of reporting, and compliance with applicable laws, regulations, and bylaws.
- II. There are inherent limitations to even the most well designed internal control system. As such, an effective internal control system can only reasonably ensure the achievement of the aforementioned goals. Moreover, the operating environment and situation may change, impacting the effectiveness of the internal control system. The internal control system of the Company features a self-monitoring mechanism. Once identified, any deficiency will be rectified immediately.
- III. The Company determines the effectiveness of the internal control system in design and enforcement in accordance with the “Regulations Governing Establishment of Internal Control Systems by Public Companies” (hereinafter referred to as “the Regulations”). The Regulations are instituted for judging the effectiveness of the design and enforcement of the internal control system. There are five components of effective internal control as specified in the Regulations with which the procedure for effective internal control is measured, namely: (1) Control environment, (2) Risk assessment, (3) Control activities, (4) Information and Communications, and (5) Monitoring activities. Each of the elements in turn contains certain audit items. Refer to the Regulations for details.
- IV. The Company has adopted the aforementioned internal control system for an internal audit on the effectiveness of the design and enforcement of the internal control system.
- V. Based on the aforementioned audit findings, the Company holds that it has reasonably preserved the achievement of the aforementioned with the internal control system as of December 31, 2020 (including the monitoring over the subsidiaries), including the effectiveness and efficiency in operation, reliability, timeliness, transparency, and regulatory compliance of reporting, and compliance with relevant regulatory requirements, and that the design and enforcement of internal control are effective.

- VI. This statement of declaration shall form an integral part of the annual report and prospectus of the company and will be publicly announced. If any fraudulent information, concealment or unlawful practices are discovered in the content of the aforementioned information, the Company shall be held liable under Article 20, Article 32, Article 171 and Article 174 of the Securities and Exchange Act.
- VII. This statement was approved by the Board on March 5, 2021 in the presence of seven (7) directors, who concurred unanimously.

Alchip Technologies, Limited



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Kinying Kwan  
Chairman



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Johnny Shyang-Lin Shen  
CEO

## IV. Capital Overview

### 4.1 Capital and Shares

#### 4.1.1 Capitalization

##### A. Issued shares

Unit:share/NT\$

Month/ Year	Par Value (NT\$)	Authorized Capital		Paid-in capital		Remark		
		Shares	Amount	Shares	Amount (NT\$ thousand)	Sources of Capital	Capital Increased by Assets Other than Cash	Other
2010.07	10	100,000,000	1,000,000,000	52,420,842	523,364,710	Capital surplus transferred to capital	None	-
2010.07	10	100,000,000	1,000,000,000	53,871,342	538,713,420	New shares issued upon the exercise of share options	None	-
2013.11	10	100,000,000	1,000,000,000	53,947,342	539,473,420	New Shares issued upon the exercise of share options	None	-
2014.10	10	100,000,000	1,000,000,000	61,628,342	616,283,420	New shares issued through capital increase by cash	None	-
2014.01-12	10	100,000,000	1,000,000,000	63,481,815	634,818,150	New Shares issued upon the exercise of share options	None	-
2015.01-03	10	100,000,000	1,000,000,000	63,766,815	637,668,150	New Shares issued upon the exercise of share options	None	-
2015.08	10	100,000,000	1,000,000,000	61,567,815	615,678,150	Cancellation of Treasury Stocks	None	-
2016.11	10	100,000,000	1,000,000,000	60,702,815	607,028,150	Cancellation of Treasury Stocks	None	-
2017.07-12	10	100,000,000	1,000,000,000	61,001,038	610,010,380	New Shares issued upon the exercise of share options	None	-
2018.01-11	10	100,000,000	1,000,000,000	61,698,098	616,980,980	New Shares issued upon the exercise of share options	None	-
2018.12	10	100,000,000	1,000,000,000	59,773,098	597,730,980	Cancellation of Treasury Stocks	None	-
2019.01-12	10	100,000,000	1,000,000,000	60,612,932	606,129,320	New Shares issued upon the exercise of share options	None	-
2020.01-12	10	100,000,000	1,000,000,000	62,028,463	620,284,630	New Shares issued upon the exercise of share options	None	-
2021.01	10	100,000,000	1,000,000,000	69,628,463	696,284,630	New shares issued through capital increase by cash	None	-
2021.01-04	10	100,000,000	1,000,000,000	70,294,218	702,942,180	New Shares issued upon the exercise of share options	None	-

## B. Capital and Shares

April 13, 2021; Unit: Share

Type of Stock	Authorized Capital			Remark
	Outstanding Shares	Un-issued Shares	Total Shares	
Common Stock	70,294,218	24,505,765	100,000,000	-

## C. Information for shelf registration : Not applicable.

Securities Type	Volume to be issued		Issued Amount		Purpose of Issuance and Expected Benefits for Securities Issued	Scheduled Issuance Period for Securities Unissue	Remarks
	Total Shares	Authorized Amount	Shares	Price (NT\$)			
N/A							

### 4.1.2 Status of shareholders

April 13,2021

Item	Government Agencies	Financial Institutions	Treasury Stocks	Other Juridical Persons	Domestic Natural Persons	Foreign Institutions & Natural Persons	Total
Number of Shareholders	0	4	0	234	8,341	349	8,928
Shareholding (shares)	0	559,560	0	11,191,447	12,462,280	46,080,931	70,294,218
Shareholding Percentage	0%	0.80%	0%	15.92%	17.73%	65.55%	100.00%

Note: The percentage of shareholding for the capital investment from China is 0.5%.

### 4.1.3 Shareholding distribution status

With par value of \$10 per share;April 13,2021;Unit:shares/%

Class of Shareholding (Unit : Share)	Number of Shareholders	Shareholding (Shares)	Percentage
1 ~ 999	4,721	154,690	0.22%
1,000 ~ 5,000	3,505	5,456,519	7.76%
5,001 ~ 10,000	235	1,833,348	2.61%
10,001 ~ 15,000	97	1,246,331	1.77%
15,001 ~ 20,000	59	1,047,984	1.49%
20,001 ~ 30,000	54	1,345,281	1.91%
30,001 ~ 40,000	43	1,523,652	2.17%
40,001 ~ 50,000	23	1,069,381	1.52%
50,001 ~ 100,000	72	5,225,584	7.43%
100,001 ~ 200,000	52	7,339,761	10.44%
200,001 ~ 400,000	25	6,750,299	9.60%
400,001 ~ 600,000	18	8,638,435	12.30%
600,001 ~ 800,000	10	7,024,301	9.99%
800,001 ~ 1,000,000	6	5,581,652	7.94%
1,000,001 or over	8	16,057,000	22.85%
Total	8,928	70,294,218	100.00%



**4.1.4 List of major shareholders: List all shareholders with a stake of 5 percent or rank in the top 10 in shareholding percentage, and specify the number of shares and stake held by each shareholder on the list**

April 13,2021;Unit:shares/%

Shareholder's Name	Shareholding	
	Shares	Percentage
GAOLING FUND, L.P.	3,182,000	4.53%
PineBridge Global Funds - PineBridge Asia Ex Japan Small Cap Equity Fund(U8T8)	2,635,000	3.75%
mitsubishi UFJ MORGSTAN SECURITIES CO., LTD.--EQUITY TRADING DIVISION (PROPRIETARY TRADING DESK)	2,404,000	3.42%
BLACKROCK GLOBAL FUNDS - NEXT GENERATION TECHNOLOGY FUND	2,224,000	3.16%
AIA International Limited-Relative Asia Equity HEF Portfolio	1,609,000	2.29%
Johnny Shyang-Lin Shen	1,441,652	2.05%
Standard Chartered Bank (Taiwan) Limited as custodian of Credit Suisse International	1,424,000	2.03%
Allianz Global Investors Fund - Allianz Oriental Income(AD69)	1,300,000	1.85%
Nomura Taiwan Superior Equity Fund	1,279,000	1.82%
UPAMC GREAT CHINA Fund	987,000	1.40%

**4.1.5 Market price, net worth, earnings,dividends per common share**

Unit: NT\$; Thousand of Shares

Items	2019	2020	As of April 13,2021
<b>Market Price per Share</b>			
Highest Market Price	255.50	702	1,000
Lowest Market Price	64.20	148.5	623
Average Market Price	123.13	419.17	847.55
<b>Net Worth per Share</b>			
Before Distribution	54.47	62.69	-
After Distribution	50.94	(Note 1)	-
<b>Earnings per Share</b>			
Weighted Average Shares(thousand shares)	60,176	61,340	-
BasicEarnings Per Share	7.20	13.61	-
<b>Dividends per Share</b>			
Cash Dividends	3.504	(Note1)	-
Stock Dividends			
Dividends from Retained Earnings	-	-	-
Dividends from Capital Surplus	-	-	-
Accumulated Undistributed Dividends	-	-	-
<b>Return on Investment</b>			
Price / Earnings Ratio (Note2)	17.10	30.80	-
Price / Dividend Ratio (Note 3)	35.14	(Note 1)	-
Cash Dividend Yield Rate (Note 4)	0.028	(Note 1)	-

Note 1 : Pending on the approval of 2021 shareholders' meeting.

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

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

Note 4 : Cash Dividend Yield Rate = Cash Dividends per Share / Average Market Price

#### **4.1.6 Company's Dividend Policy and Status**

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##### **A. The Company's Dividend Policy: The regulations of dividend distribution are shown below in accordance to the Memorandum and Articles of Association of the Company.**

- (1) The Company shall set aside no less than 1% of its annual profits (the annual profits specified in this Article refers to the annual income before tax and before bonuses are set aside for employees and Directors) as bonus to employees of the Company and set aside no more than 2% of its annual profits as bonus to Directors, provided however that the Company shall first offset its losses in previous years that have not been previously offset. The distribution of bonus to employees may be made by way of cash or Shares, which may be distributed under an incentive programme approved pursuant to Article 11.1 above. The employees under Article 34.1 may include certain employees of the Subsidiaries who meet the conditions prescribed by the Company. The distribution of bonus to employees and to Directors shall be approved by a majority of the Directors present at a meeting attended by two-thirds or more of the total number of the Directors and shall be reported to the Members at the general meeting. A Director who also serves as an executive officer of the Company and/or its Subsidiaries may receive a bonus in his capacity as a Director and a bonus in his capacity as an employee.
- (2) As the Company is in the growing stage, the dividend distribution may take the form of a cash dividend and/or stock dividends and shall take into consideration the Company's capital expenditures, future expansion plans, and financial structure and funds requirement for sustainable development needs etc. The Company may distribute profits in accordance with a proposal for distribution of profits prepared by the Directors and approved by the Members by an Ordinary Resolution at any general meeting. The Directors shall prepare such proposal as follows: the proposal shall begin with the Company's Annual Net Income after tax and offset its losses in previous years that have not been previously offset, and set aside a special capital reserve, if one is required, in accordance with the Applicable Public Company Rules or as requested by the authorities in charge. Except otherwise stipulated by the applicable laws and the Applicable Public Company Rules, the Company may take into consideration the circumstances and development stage of the Company, in response to any future funding requirement and long term financial planning, while satisfying the shareholders expectation in respect of cashflow, propose profit distribution plan in connection with the retained earnings for approval at the meetings of the shareholders; the distribution of retained earnings may proceed by way of cash dividend or by applying such sum in paying up in full unissued Shares for allotment and distribution credited as fully paid-up pro rate to the Members, and the total amount of Dividends shall not be lower than 10% of the profit of the then current year after deducting the aforementioned amounts, and provided the total amount of cash dividend to be distributed shall be no lower than 10% of the aggregate dividend distributed to shareholders and no more than 100% of the aggregate dividend distributed to shareholders.
- (3) Subject to the Statute, the Articles and the Applicable Public Company Rules, the Directors may declare Dividends and distributions on Shares in issue and authorise payment of the Dividends or distributions out of the funds of the Company lawfully available therefor. No Dividend or distribution shall be paid except out of the realised or unrealised profits of the Company, or out of the share premium account or as otherwise permitted by the Statute.

- (4) Except as otherwise provided by the rights attached to Shares, all Dividends shall be declared and paid in proportion to the number of Shares that a Member holds. If any Share is issued on terms providing that it shall rank for Dividend as from a particular date that Share shall rank for Dividend accordingly.
- (5) The Directors may deduct from any Dividend or distribution payable to any Member all sums of money (if any) then payable by him to the Company on any account.
- (6) The Directors may, after obtaining an Ordinary Resolution, declare that any distribution other than a Dividend be paid wholly or partly by the distribution of specific assets and in particular of shares, debentures, or securities of any other company or in any one or more of such ways and where any difficulty arises in regard to such distribution, the Directors may settle the same as they think expedient and fix the value for distribution of such specific assets or any part thereof and may determine that cash payments shall be made to any Members upon the basis of the value so fixed in order to adjust the rights of all Members and may vest any such specific assets in trustees as may seem expedient to the Directors.
- (7) Any Dividend, distribution, interest or other monies payable in cash in respect of Shares may be paid by wire transfer to the holder or by cheque or warrant sent through the post directed to the registered address of the holder. Every such cheque or warrant shall be made payable to the order of the person to whom it is sent.
- (8) No Dividend or distribution shall bear interest against the Company.
- (9) Any Dividend which cannot be paid to a Member and/or which remains unclaimed after six months from the date of declaration of such Dividend may, in the discretion of the Directors, be paid into a separate account in the Company's name, provided that the Company shall not be constituted as a trustee in respect of that account and the Dividend shall remain as a debt due to the Member. Any Dividend which remains unclaimed after a period of six years from the date of declaration of such Dividend shall be forfeited and shall revert to the Company.

#### **B. Proposed Distribution of 2020 Profits**

The Board adopted a proposal for 2020 profit distribution as follows:

Cash dividends to common shareholders is US\$16,810,076 (US\$0.24054 per share). The proposal is subject to shareholders' approval at the 2021 Annual Shareholders' Meeting.

#### **4.1.7 Effect of stock dividend distribution to the Company's operating performance and EPS**

Not applicable.

#### **4.1.8 Directors' Remuneration and Employees' Compensation**

##### **A. The percentages or ranges with respect to Directors' Remuneration and Employees' Compensation as set forth in the company's Articles of Incorporation:**

The Company will allocate no less than 1% as employees' compensation and no more than 2% as directors' remuneration of its profits before tax prior to the deduction of compensation to employees and Directors for the year, respectively.

##### **B. The basis for estimating the amount of Directors' Remuneration and Employees' Compensation, the basis for calculating the number of shares to be distributed as stock bonuses, and the accounting treatment of discrepancy, if any, between the actual distributed amount and the estimated figure, for the current period:**

The Company accrued directors' remuneration and employees' compensation are US\$816,565 and US\$3,266,258 respectively. If there is discrepancy between the actual distribution and the estimated amount, the Company will recognize the difference as an adjustment to income of next year.

**C. Information on the distribution of compensation approved by the Board of Directors:**

(1) Distribution in cash or shares of compensation to employees and Directors. If there are any discrepancies between such an amount and the estimated figure for the year these expenses are recognized, the discrepancy, reasons therefor, and how it is treated shall be disclosed: None.

(2) The amount of distribution in shares of compensation to employees, and as a percentage of the sum of the current after-tax net income on individual or separate financial statements and total compensation to employees: None.

**D. The actual distribution of Directors' Remuneration and Employees' Compensation for the previous year (including the share number, dollar amount, and stock price, of the shares distributed), and, if there is any discrepancy between the actual distribution and the recognized compensation to employees and directors, additionally the discrepancy, reasons therefor, and how it is treated:** There is no discrepancy between the actual distribution and recognized compensation to employees and directors.

#### 4.1.9 List of Share Buyback as of April 13, 2021

Batch Order	1 <sup>st</sup> Batch	2 <sup>nd</sup> Batch	3 <sup>rd</sup> Batch	4 <sup>th</sup> Batch	5 <sup>th</sup> Batch
Purpose of the Buyback	Maintain the company's credibility and shareholders' equity	Maintain the company's credibility and shareholders' equity	Maintain the company's credibility and shareholders' equity	Maintain the company's credibility and shareholders' equity	Maintain the company's credibility and shareholders' equity
Actual Buyback period	2015/03/06~2015/05/05	2015/05/15~2015/06/12	2016/8/26~2016/9/26	2017/3/13~2017/5/9	2018/9/12~2018/10/30
Price range for Buybacks	NT\$50.05 to NT\$123.82	NT\$35.91 to NT\$87.58	NT\$19.01~ NT\$41.21	NT\$28.88 ~NT\$57.54	NT\$64.26 ~NT\$167.94
Number of shares bought back	1,015 thousand shares of common stock	1,184 thousand shares of common stock	865 thousand shares of common stock	0 shares of common stock	1,925 thousand shares of common stock
Total Value of Shares bought back	NT\$60,917,192	NT\$52,462,561	NT\$21,692,815	NT\$0	NT\$157,947,222
The ratio of number of shares buyback to number of expected shares buyback	50.75%	59.20%	86.50%	0%	96.25%
Number of shares that have already been canceled and transferred	1,015 thousand shares of common stock	1,184 thousand shares of common stock	865 thousand shares of common stock	0 shares of common stock	1,925 thousand shares of common stock
Accumulated number of shares held by the Company	0 share of common stock	0 share of common stock	0 share of common stock	0 share of common stock	0 shares of common stock
Ratio of the accumulated number of shares held by the Company to the total number of ordinary shares issued	0%	0%	0%	0%	0%

#### 4.1.10 Information on the Company's issuance of bonds

None.

#### 4.1.11 Information on issuance of preferred shares

None.

#### 4.1.12 Information on issuance of global depository receipts

Item	Issue Date	January 20, 2021	
Issuance and listing	Luxembourg Exchange		
Total amount	US\$195,548,000		
Offering price	US\$25.73 per GDS		
Number of GDS to be issued:	7,600,000 GDS		
Sources of the securities underlying the GDS	Issuance of new common shares by cash capital increase for sponsoring GDS issuance		
Number of shares represented by each GDS	Each GDS represents 1 common share		
Rights and obligations of GDS holders	The new common shares have the same rights and obligations as the Company's existing issued and outstanding common shares.		
Trustee	None		
Depository bank	Citibank, N.A.		
Custodian bank	Citibank Taiwan Limited		
Outstanding balance	756,000 units		
Treatment of expenses incurred at issuance and thereafter	Borne by the issuing company		
Important conventions about depository and escrow agreement	Please refer to the depository and custodian contract.		
Market price per unit (US\$)	Current year to April 13, 2021	Highest	34.865
		Lowest	23.2
		Average	30.937

### 4.1.13 Employee Stock Options

#### A. Issuance of Employee Stock Options

March 31, 2021

Types of Employee Stock Options	Employee Stock Options in 2015		Employee Stock Options in 2016	
Approval date	March 30, 2015		April 26, 2016	
Issue date	April 24, 2015	March 4, 2016	November 11, 2016	March 10, 2017
Units issued	864,000	1,136,000	1,200,000	800,000
Shares of stock options to be issued as a percentage of outstanding shares	1.24%	1.62%	1.72%	1.14%
Period	The stock options shall be valid for 10 years from the Grant date and shall expire after such period		The stock options shall be valid for 10 years from the Grant date and shall expire after such period	
Method of performance	Issuance of new shares		Issuance of new shares	
Period and percentage in which subscription is restricted (%)	After two full years, 50% of stock options can be exercised. After three full years, 75% of stock options can be exercised. After four full years, 100% of stock options can be exercised.		After two full years, 50% of stock options can be exercised. After three full years, 75% of stock options can be exercised. After four full years, 100% of stock options can be exercised.	
Exercised shares	471,864	713,744	714,000	404,300
Amount of the shares exercised	26,235,638	26,123,030	17,564,400	16,333,720
Unexercised shares	337,136	234,756	261,000	217,450
Price per share of the unexercised shares	55.60	36.60	24.60	40.40
Percentage of unexercised shares to total issued shares	0.48%	0.34%	0.37%	0.31%
Number of invalid shares (Note )	55,000	187,500	225,000	178,250
Impact on possible dilution of shareholdings	Financial Statements will be presented in accordance with the International Accounting Standards. However, after two full years upon expiration of the employee stock options granted by the Company, 50% of the granted stock options can be exercised. After three full years, 75% of stock options can be exercised. After four full years, 100% of stock options can be exercised. The influence on shareholders' interests will be gradually diluted.			

Note : The number of invalid shares were from employees' turnover and expired employee stock options.

Types of Employee Stock Options	Employee Stock Options in 2017					
Approval date	April 25, 2017					
Issue date	November 28, 2017	December 5, 2017	January 5, 2017	February 7, 2018	March 30, 2018	April 18, 2018
Units issued	330,000	500,000	329,000	95,000	250,000	200,000
Shares of stock options to be issued as a percentage of outstanding shares	0.47%	0.71%	0.47%	0.14%	0.36%	0.29%
Period	The stock options shall be valid for 10 years from the Grant date and shall expire after such period					
Method of performance	Issuance of new shares					
Period and percentage in which subscription is restricted (%)	After two full years, 50% of stock options can be exercised. After three full years, 75% of stock options can be exercised. After four full years, 100% of stock options can be exercised.					
Exercised shares	148,500	27,500	111,000	20,500	89,250	72,500
Amount of the shares exercised	12,147,300	2,076,250	10,667,100	1,922,900	10,335,150	8,816,000
Unexercised shares	166,500	392,500	156,000	49,500	138,250	101,500
Price per share of the unexercised shares	81.80	75.50	96.10	93.80	115.80	121.60
Percentage of unexercised shares to total issued shares	0.24%	0.56%	0.22%	0.07%	0.20%	0.15%
Number of invalid shares (Note )	15,000	80,000	62,000	25,000	22,500	26,000
Impact on possible dilution of shareholdings	Financial Statements will be presented in accordance with the International Accounting Standards. However, after two full years upon expiration of the employee stock options granted by the Company, 50% of the granted stock options can be exercised. After three full years, 75% of stock options can be exercised. After four full years, 100% of stock options can be exercised. The influence on shareholders' interests will be gradually diluted.					

Note : The number of invalid shares were from employees' turnover and expired employee stock options.



Types of Employee Stock Options	Employee Stock Options in 2018			
Approval date	May 21, 2018			
Issue date	August 10, 2018	September 20, 2018	March 19, 2019	May 20, 2019
Units issued	500,000	500,000	500,000	500,000
Shares of stock options to be issued as a percentage of outstanding shares	0.71%	0.71%	0.71%	0.71%
Period	The stock options shall be valid for 10 years from the Grant date and shall expire after such period			
Method of performance	Issuance of new shares			
Period and percentage in which subscription is restricted (%)	After two full years, 50% of stock options can be exercised. After three full years, 75% of stock options can be exercised. After four full years, 100% of stock options can be exercised.			
Exercised shares	92,000	117,337	8,500	0
Amount of the shares exercised	11,113,200	10,090,982	628,150	0
Unexercised shares	363,000	334,263	474,500	475,000
Price per share of the unexercised shares	119.60	86.00	73.90	73.20
Percentage of unexercised shares to total issued shares	0.52%	0.48%	0.68%	0.68%
Number of invalid shares (Note )	45,000	48,400	17,000	25,000
Impact on possible dilution of shareholdings	Financial Statements will be presented in accordance with the International Accounting Standards. However, after two full years upon expiration of the employee stock options granted by the Company, 50% of the granted stock options can be exercised. After three full years, 75% of stock options can be exercised. After four full years, 100% of stock options can be exercised. The influence on shareholders' interests will be gradually diluted.			

Note : The number of invalid shares were from employees' turnover and expired employee stock options.

Types of Employee Stock Options	Employee Stock Options in 2019				
Approval date	May 21, 2019				
Issue date	August 7, 2019	November 7, 2019	November 22, 2019	February 18, 2020	April 28, 2020
Units issued	500,000	40,000	160,000	150,000	150,000
Shares of stock options to be issued as a percentage of outstanding shares	0.71%	0.06%	0.23%	0.21%	0.21%
Period	The stock options shall be valid for 10 years from the Grant date and shall expire after such period				
Method of performance	Issuance of new shares				
Period and percentage in which subscription is restricted (%)	After two full years, 50% of stock options can be exercised. After three full years, 75% of stock options can be exercised. After four full years, 100% of stock options can be exercised.				
Exercised shares	0	0	0	0	0
Amount of the shares exercised	0	0	0	0	0
Unexercised shares	490,000	40,000	147,000	150,000	148,000
Price per share of the unexercised shares	94.10	182.50	202.60	204.60	264.60
Percentage of unexercised shares to total issued shares	0.70%	0.06%	0.21%	0.21%	0.21%
Number of invalid shares (Note )	10,000	0	13,000	0	2,000
Impact on possible dilution of shareholdings	Financial Statements will be presented in accordance with the International Accounting Standards. However, after two full years upon expiration of the employee stock options granted by the Company, 50% of the granted stock options can be exercised. After three full years, 75% of stock options can be exercised. After four full years, 100% of stock options can be exercised. The influence on shareholders' interests will be gradually diluted.				

Note : The number of invalid shares were from employees' turnover and expired employee stock options.

Types of Employee Stock Options	Employee Stock Options in 2020			
Approval date	April 28, 2020			
Issue date	June 15, 2020	July 31, 2020	December 15, 2020	March 8, 2021
Units issued	400,000	200,000	800,000	600,000
Shares of stock options to be issued as a percentage of outstanding shares	0.57%	0.29%	1.14%	0.86%
Period	The stock options shall be valid for 10 years from the Grant date and shall expire after such period			
Method of performance	Issuance of new shares			
Period and percentage in which subscription is restricted (%)	After two full years, 50% of stock options can be exercised. After three full years, 75% of stock options can be exercised. After four full years, 100% of stock options can be exercised.			
Exercised shares	0	0	0	0
Amount of the shares exercised	0	0	0	0
Unexercised shares	400,000	198,000	796,000	600,000
Price per share of the unexercised shares	334.90	585.90	578.40	830.00
Percentage of unexercised shares to total issued shares	0.57%	0.28%	1.14%	0.86%
Number of invalid shares (Note )	0	2,000	4,000	0
Impact on possible dilution of shareholdings	Financial Statements will be presented in accordance with the International Accounting Standards. However, after two full years upon expiration of the employee stock options granted by the Company, 50% of the granted stock options can be exercised. After three full years, 75% of stock options can be exercised. After four full years, 100% of stock options can be exercised. The influence on shareholders' interests will be gradually diluted.			

Note : The number of invalid shares were from employees' turnover and expired employee stock options.

**B. List of executives and the top ten employees receiving Employee Stock Options**

March 31, 2021

Title	Name	No. of Subscribed Shares	Ratio of Subscribed Shares to Total Issued Shares	Exercised				Unexercised			
				No. of Shares	Price (NT\$)	Amount (NT\$ thousand)	Ratio of Shares to Total Issued Shares	No. of Shares	Price (NT\$)	Amount (NT\$ thousand)	Ratio of Shares to Total Issued Shares
CEO	Johnny Shyang-Lin Shen			145.0	55.6	8,062.00	0.21%	295.0	55.6	16,402.00	0.42%
GM of Japan Business Unit	Junichiro Hosaka			100.0	36.6	3,660.00	0.14%	139.0	36.6	5,087.40	0.20%
GM of US Business Unit	Hiroyuki Nagashima			380.0	24.6	9,348.00	0.54%	195.0	24.6	4,797.00	0.28%
GM of China Business Unit	Andy Lin			0.0	40.4	0.00	0.00%	50.0	40.4	2,020.00	0.07%
Sr. VP of Design Engineering	Leo Cheng			40.0	81.8	3,272.00	0.06%	30.0	81.8	2,454.00	0.04%
VP of Sales	Rebert Chang			27.5	75.5	2,076.25	0.04%	352.5	75.5	26,613.75	0.50%
CFO	Daniel Wang	3,379	4.83%	0.0	96.1	0.00	0.00%	15.0	96.1	1,441.50	0.02%
Financial Controller	Nancy Chan			40.0	119.6	4,784.00	0.06%	215.0	119.6	25,714.00	0.31%
VP of Strategic Alliance	Peter Teng			0.0	73.9	0.00	0.00%	330.0	73.9	24,387.00	0.47%
Sr. VP of Business Development	Dave Hwang (Note)			0.0	94.1	0.00	0.00%	300.0	94.1	28,230.00	0.43%
				0.0	334.9	0.00	0.00%	375.0	334.9	125,587.50	0.54%
				0.0	830.0	0.00	0.00%	350.0	830.0	290,500.00	0.50%

Note : Mr. Dave Hwang became an executive on March 5, 2021.

Executives

Title	Name	No. of Subscribed Shares	Ratio of Subscribed Shares to Total Issued Shares	Exercised				Unexercised			
				No. of Shares	Price (NT\$)	Amount (NT\$ thousand)	Ratio of Shares to Total Issued Shares	No. of Shares	Price (NT\$)	Amount (NT\$ thousand)	Ratio of Shares to Total Issued Shares
Director of Design Solution	Doni Ding			160.00	55.60	8,896.00	0.23%	20.00	55.60	1,112.00	0.03%
VP of Japan Business Unit	Kozo Fujita			140.00	36.60	5,124.00	0.20%	53.00	36.60	1,939.80	0.08%
Deputy GM of Japan Business Unit	Hiroyuki Furuzono			95.00	24.60	2,337.00	0.14%	30.00	24.60	738.00	0.04%
Director of Corporate HR	Daisy Hsu			27.50	40.40	1,111.00	0.04%	10.50	40.40	424.20	0.02%
VP of R&D	James Huang			53.00	81.80	4,335.40	0.08%	117.00	81.80	9,570.60	0.17%
VP of MFG Engineering	Vincent Ku		1.92%	0.00	75.50	0.00	0.00%	40.00	75.50	3,020.00	0.06%
Director of Design Engineering	Yuntao Liao	1,163.6		15.25	96.10	1,465.53	0.02%	7.75	96.10	744.78	0.01%
Sr. Director of Circuit Technologies	Allan Lin			5.00	115.80	579.00	0.01%	5.00	115.80	579.00	0.01%
Sr. Director of Design Engineering	Mitsuya Takashima			13.00	119.60	1,554.80	0.02%	87.00	119.60	10,405.20	0.12%
Director of Design Engineering	Feiwei Wu			3.80	86.00	326.80	0.01%	25.80	86.00	2,218.80	0.04%
VP of Design Engineering	Jokie Zhou			0.00	73.90	0.00	0.00%	80.00	73.90	5,912.00	0.11%
				0.00	73.20	0.00	0.00%	165.00	73.20	12,078.00	0.24%
				0.00	94.10	0.00	0.00%	30.00	94.10	2,823.00	0.04%
				0.00	202.60	0.00	0.00%	20.00	202.60	4,052.00	0.03%

Top Ten Employees

				0.00	204.60	0.00	0.00%	65.00	204.60	13,299.00	0.09%
			0.00	0.00	264.60	0.00	0.00%	10.00	264.60	2,646.00	0.01%
			0.00	0.00	578.40	0.00	0.00%	50.00	578.40	28,920.00	0.07%
			0.00	830.00	0.00	0.00%	52.00	830.00	43,160.00	0.07%	

**C. Status of any private placement of employee stock warrants during the 3 most recent years and up to the date of the publication of the Annual Report:**  
None.

**4.1.14 Issuance of New Restricted Employee Shares**

None.

**4.1.15 Status of mergers or acquisitions**

None.

**4.1.16 Issuance of new shares for merging and transferring the stocks of other companies**

None.

**4.2 Implementation of Company's Capital Allocation Plans**

Year 2021 issued new common shares to be offered in the form of Global Depository Shares.

(1) Description of Plan

1. Proceeds Needed from the Plans : US\$183,000 thousands, converting to NT\$5,124,000 thousands.
2. Sources of Proceeds : Issued new common shares to be offered in the form of Global Depository Shares.
3. Use of Proceeds Plan and Schedule :

Unit : thousands

Plan	Expected Date of Completion	Expected Amount	Use of Proceeds Plan							
			Year 2021				Year 2022			
			1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter	1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter
Purchase of Equipment	June 30, 2022	US\$	183,000	19,400	29,000	25,600	37,800	45,000		
		NT\$	5,124,000	543,200	812,000	716,800	1,058,400	1,260,000		

4. Estimated Benefits

The Company dedicates on cost down, lower power consumption and optimizing yield and die size of advanced process node SoC. To fulfill customized product demands, the Company plans to purchase mask equipment to react to the rapid growth trend of SoC market in the future. Expected benefits are as below:

Year	Product	Increase of Production Quantity	Increase of Selling Quantity	Increase of Revenues	Increase of Gross Profits	Increase of Operating Profits
2021	(ASIC/SoC)	665	665	1,330,000	174,400	83,731
2022	(ASIC/SoC)	1,110	1,110	3,003,482	411,539	197,539
2023	(ASIC/SoC)	11,625	11,625	4,539,575	689,955	331,178
2024	(ASIC/SoC)	22,629	22,629	6,174,399	930,499	446,639
2025	(ASIC/SoC)	22,629	22,629	5,929,893	893,651	428,953

(2) Status of Implementation

Plan	Status of Implementation	Amount As of March 31, 2021		Reason of schedule changed and improvement plan
		US\$	NT\$	
Purchase of Equipment	Amount to be used	Estimated	26,200	The schedule delay of implement was mainly due to the schedule change in projects of SoC design and result in adjustment of equipment purchase schedule. The projects will complete design in 2 <sup>nd</sup> quarter 2021 and will execute equipment purchase plan.
		Actual	733,600	
	% of execution`	Estimated	9,830	
		Actual	275,246	
Total	Amount to be used	Estimated	14.31	
		Actual	5.37	
	% of execution`	Estimated	26,200	
		Actual	733,600	
Amount to be used	Estimated	9,830		
	Actual	275,246		
% of execution`	Estimated	14.31		
	Actual	5.37		

Unit: thousand



## V. Overview of Business Operations

### 5.1 Business Activities

#### 5.1.1 Business scope

##### A. Main areas of business operations

Alchip engages in Application Specific IC (ASIC) and System-on-Chip (SoC) design, manufacturing and production, and is especially good at deep-submicron and high-end processing chips with high complexity.

##### B. Operational proportion

Unit: NT\$ thousand

Category	2019		2020	
	Amount	%	Amount	%
ASIC and Chip production	4,314,253	99.59	6,903,529	97.52
NRE	13,372	0.31	169,578	2.40
Others	4,331	0.10	5,812	0.08
Total	4,331,956	100	7,078,919	100.00

##### C. Main products and Services

- (1) ASIC and Chip production: Provide customers with Non-Recurring Engineering (NRE) of Application Specific Integrated Circuit (ASIC) and System on Chip (SoC), and mass production management of wafer manufacturing, packaging, and testing.
- (2) Non-Recurring Engineering (NRE): Mainly provide the circuit design component database and all kinds of Silicon Intellectual Property (SIP) required by product design, produce circuit diagrams for mask process, and manufacture masks, wafer, cutting, and packaging on a consign basis and then deliver the trial production samples after doing product testing by our engineers.
- (3) Others: Only provide customers with back-end wafer fabrication, packaging, and testing.

##### D. New products development

The Company is committed to R&D and manufacturing of leading edge integrated circuit, including custom design utilities and Design Methodology to ensure quality services. It also provides 2.5D packaging and Silicon Intellectual Property (IP) total solutions (including: DDR/PCIE/HBM/D2D/SERDES) to establish corresponding designs for AI/HPC market demands.

#### 5.1.2 Industry overview

##### A. Current status and Development of the Industry

With the great leap forward in semiconductor process technology, the complexity of chips is getting higher and higher. The semiconductor industry announces to enter an era of specialization. The Company specially provides design and manufacturing services of Application Specific Integrated Circuit (ASIC) and System on Chip (SoC) with high complexity and mass production. The current status and development of the industry is described as follows:

###### (1) Rise of fabless ASIC

In the past, a system company could choose to develop its own ASIC/SoC to get the advantage of differentiation and stay competitive, or to entrust the turnkey production process including design, manufacturing, packaging, and testing to reliable ASIC partners (such as IBM and LSI Logic). However, as the process technology enters into the generation of deep submicron, expenditures on

R&D in technology, investments in machinery, equipment, and factories rise rapidly. The existing Integrated Design Manufacturers (IDMs) are unable to afford the investment in the infrastructure and overtaken by pure-play foundries. As a result, more system companies concentrate resources on product specifications and front-end design, and outsource the back-end design and production of products to professional fabless ASIC companies.

Through collaboration with strategic partners (including wafer fabrication, packaging, and testing house), a fabless ASIC company provides a complete solution from RTL/Netlist to chip manufacturing, packaging, and testing. Thus, the system company enjoys the faster time to market, lower costs, and more professional design capability.

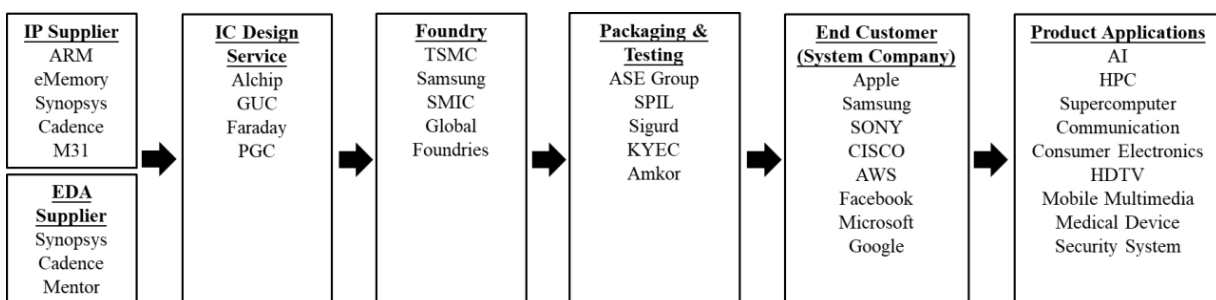
(2) Overview of System on Chip (SoC)

With the evolution of IC manufacturing process and many consumer electronics development towards miniaturization, the market demand for thin, short, power-saving multifunction increase dramatically, this makes SoC become the trend for the development of system companies in the future. SoC refers to the integration of the core processor, logic unit, memory unit, and a variety of I/O interfaces onto a single chip. One chip alone can get the system function completely and leave the extra space to chips performing other different functions, such as GPS positioning, WiMax, Audio/Video IC, camera IC, TV chip, etc. through which the operational functions of system products can be enhanced.

While foundry process is moving towards nanoscale node and external IPs are broadly adopted, SoC designer faces challenges from design validation and analysis. The growing SoC integration difficulty leads to surge of investment and risk in an SoC project. By preparing total design solutions tightly coupled with manufacturing process, the Company provides services with high add-on values to its customers. Very few fabless ASIC companies in the industry are capable of designing high-end SoC, therefore the Company’s design capacity is fully occupied in most of time. Plenty of future growth can be expected that big system companies will outsource more SoC designs.

**B. Relevance among the upper-stream, middle-stream and down-stream in the industry**

The fabless ASIC industry drives the development of all system applications, silicon intellectual property (SIP), manufacturing, packaging, testing, etc., forming the industry chain with specialization and division of labor. Each performs one’s own functions as shown below:



**C. Trends of product development**

(1) Application Specific Integrated Circuit (ASIC): It refers to an integrated circuit used in the particular application. On the circuit board, one unit of ASIC chip specifically designed by each company can always be found. Over the last few years, some of the outstanding tech breakthroughs such as AI chips, big data and AI algorithms stand out to be the new technology. These technologies become the main focus of ASIC application market. Artificial intelligence has rapidly expanded in the fields of cloud computing, deep learning, security monitoring, intelligent manufacturing and automatic driving, and has become the competitive target in semiconductor industry. In addition, the ASIC chip application market is broadly divided into six segments including Computers and Peripherals, Wired

Communications, Wireless Communications, Consumer, Automotive, and Industrial and Others. In which, consumer electronics still account for the highest proportion with the growth momentum mainly coming from mobile communications and high-definition TV applications, and wireless communications, computers, and peripherals coming in second.

- (2) System on Chip (SoC): With the evolution of the process, all system functions can be integrated into a single chip. That is, the platform-based design method can be achieved through the highly integrated SoC. This design method can effectively solve issues such as the complexity and time to market of different grades of products. In the future, we can foresee that the consumer electronics can be platformized as a result of the design trend of SoC integrated chips.

#### **D. Market competition**

The primary competitors of fabless ASIC companies are Integrated Design Manufacturer (IDM) and companies of the same type. As we shift into the generation of deep submicron, large IDMs begin to decline and find themselves unable to compete with fabless ASIC companies because of the high cost of production. Currently, most IDMs gradually transform into the Fab-lite/Fabless model. Moreover, in the competition with other companies of the same type, the time to market of products becomes the main appeal of fabless ASIC customers. With the continuous improvement of the processing speed of chips, and the algorithm of modulation and demodulation becoming more complex at the same time, the designers have to evaluate carefully how to define and optimize the low-power consumption strategy for the entire chip in the shortest design cycle, and think deeply about how the package design can tolerate the ultra-high power consumption to ensure the signal quality of high-speed interfaces. Therefore, with excellent integrated services of chip design technologies and manufacturing solutions, Alchip acts as a leading fabless ASIC company in this competitive global semiconductor market.

#### **5.1.3 Research and Development**

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**A. In 2020 and 2019, the Company invested NT\$784,117 thousand and NT\$685,741 thousand in R&D respectively.**

#### **B. Technologies have been developed successfully**

Alchip combines the software tools for design (EDA) and design technologies that are researched and developed internally, including circuits, physical design, and unique software tools for design, to provide customers with services improving efficiency, reduced size, lower power consumption, and fast deployment. Technologies that are researched and developed internally are shown below:

- (1) Hierarchical physical design and timing budgeting method: Through this method, the chip design can be divided into multiple parts that can be designed at the same, grasp the timing of each part while controlling the timing for each part to meet timing requirements for chips.
- (2) Physical design method: Through this method, various types of Silicon Intellectual Property (IP) are used in the high-density chip design to reduce the chip size and achieve cost cutting goals.
- (3) Timing and electrical design method: This method can improve the defect-free rate by adjusting several parameters.
- (4) Power consumption distribution method: This method can reduce power consumption and enhance electrical efficiency.
- (5) Design for Testability (DFT): This method can maximize the scope of testability and reduce other unnecessary tests reduce the testing time and cost.
- (6) Technology in the stage of product planning and specification development: Alchip conducts the cost planning for customers, including the selection of System-on-Chip (SoC) or System in Package (SiP),

planning of system cost and bill of material (BOM) costs, consideration of process maturity and Silicon Intellectual Property (IP) stability, feasibility of next-generation process (half node), and evaluation on Static Random Access Memory (SRAM) repair. It also makes selection for testing of finished products and solutions, including the joint development of test solutions with IP vendors, establishment of built-in test module (DFT, BIST), and with testing machines to achieve mass production, adoption of two sets, four sets, or even eight sets of circuit boards being tested simultaneously while making mass production to save testing cost. Finally, it develops the most appropriate packaging approach and builds a good partnership with the packaging house to exploit the best quality of the finished product and market efficiency.

- (7) Prototype and technology in the stage of production: In the prototype creation and chip mass production stage, Alchip works closely with suppliers via professional equipment and technology (built-in testing machines and test grips) to help customers reduce the time taken to enter mass production while analyzing product characteristics and sensitivity, and to formulate process conditions and test specifications for the mass production process. It also provides a small number of prototypes for customers to manufacture system engineering prototyping machines. In the final acceptance inspection process of prototyping machines of customers, Alchip prepares the mass production of chips, including the analysis on reliability/qualification. Upon entering mass production, it continues to improve the defect-free rate and shorten the testing time to reduce production costs for customers.

### C. Products have been developed successfully

Alchip have developed 450 units of products since its establishment. Products can be divided into three domains as described below:

Three domains	Product application	Current status/Process	Design outlook and planning
AI/HPC/ Communication Category	AI	<ul style="list-style-type: none"> <li>• Including 28nm/16nm/12nm/7nm/6nm</li> <li>• 2018: 2 design cases, have been in mass production</li> <li>• 2019: 2 design cases, have been in mass production</li> <li>• 2020: 10 design cases, have been in mass production</li> </ul>	Continued to design and mass produce the chips required by system big firms.
	HPC	<ul style="list-style-type: none"> <li>• Including 65nm/40nm/16nm/7nm/5nm</li> <li>• 2018: 3 design cases, have been in mass production</li> <li>• 2019: 2 design cases, have been in mass production</li> <li>• 2020: 4 design cases, have been in mass production</li> </ul>	Continued to design and mass produce the chips required by system big firms.
	Information Network Equipment	<ul style="list-style-type: none"> <li>• Including 130nm/65nm/55nm/40nm/16nm</li> <li>• 2010: 1 design case, has been in mass production</li> <li>• 2011: 3 design cases, have been in mass production</li> <li>• 2012: 2 design cases, have been in mass production</li> </ul>	Continued to design and mass produce the chips required in communication network LTE, TD-SCDMA for communication big firms.

		<ul style="list-style-type: none"> <li>• 2013: 2 design cases, have been in mass production</li> <li>• 2019: 2 design cases, have been in mass production</li> <li>• 2020: 3 design cases, have been in mass production</li> </ul>	
	Supercomputer	<ul style="list-style-type: none"> <li>• Including 90nm/65nm/40nm/28nm/16nm</li> <li>• 2006: 1 design case, has been in mass production</li> <li>• 2010: 1 design case, has been in mass production</li> <li>• 2012: 2 design cases, have been in mass production</li> <li>• 2013: 2 design cases, have been in mass production</li> <li>• 2014: 1 design case, has been in mass production</li> <li>• 2015: 2 design cases, have been in mass production</li> <li>• 2016: 3 design cases, have been in mass production</li> <li>• 2017: 3 design cases</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to mass produce supercomputer networking chips for academic institutions.</li> <li>• Cooperate with Z University in 2006, as the world's fastest supercomputer at that time.</li> </ul>
Consumer Electronics Category	High-Definition Camera Recorder	<ul style="list-style-type: none"> <li>• Including 65nm/55nm/40nm</li> <li>• A total of 8 design cases, have been in mass production</li> </ul>	Continued to design and mass produce the chips required by Japan's DSC big firms.
	High-Definition Digital TV Related Applications	<ul style="list-style-type: none"> <li>• Including 65nm/40nm/32nm</li> <li>• 2010: 7 design cases, have been in mass production</li> <li>• 2011: 6 design cases, have been in mass production</li> <li>• 2012: 5 design cases, have been in mass production</li> <li>• 2013: 8 design cases, have been in mass production</li> <li>• 2014: 1 design case, has been in mass production</li> <li>• 2015: 3 design cases, have been in mass production</li> <li>• 2016: 1 design case, has been in mass production</li> <li>• 2017: 1 design case, has been in mass production</li> <li>• 2018: 1 design case, has been in mass production</li> <li>• 2019: 1 design case, has been in mass production</li> </ul>	<ul style="list-style-type: none"> <li>• Continued to design and mass produce the chips for Japan's digital TV big firms.</li> <li>• Have begun to design the new generation of products.</li> </ul>
	Digital Camera	<ul style="list-style-type: none"> <li>• Including 65nm/55nm/40nm/28nm/14nm</li> </ul>	Continued to design and mass produce the chips for the first manufacturer in the

		<ul style="list-style-type: none"> <li>• 2010: 3 design cases, have been in mass production</li> <li>• 2011: 3 design cases, have been in mass production</li> <li>• 2012: 3 design cases, have been in mass production</li> <li>• 2013: 2 design cases, have been in mass production</li> <li>• 2015: 3 design cases, have been in mass production</li> <li>• 2016: 1 design case, has been in mass production</li> <li>• 2017: 1 design case, has been in mass production</li> <li>• 2018: 2 design cases, have been in mass production</li> <li>• 2020: 4 design cases, have been in mass production</li> </ul>	world to develop digital cameras.
	Mobile Phone	<ul style="list-style-type: none"> <li>• Including 90nm/55nm/40nm/28nm</li> <li>• 2010: 2 design cases, have been in mass production</li> <li>• 2011: 3 design cases, have been in mass production</li> <li>• 2012: 2 design cases, have been in mass production</li> <li>• 2013: 1 design case, has been in mass production</li> <li>• 2014: 1 design case, has been in mass production</li> </ul>	Continued to design and mass produce the chips required by communication big firms.
	Multimedia Player	<ul style="list-style-type: none"> <li>• Including 180nm/130nm/90nm</li> <li>• 2009: 4 design cases, have been in mass production</li> <li>• 2011: 1 design case, has been in mass production</li> <li>• 2012: 1 design case, has been in mass production</li> </ul>	Continued to design and mass produce the chips required by multimedia big firms.
	Tablet PC	<ul style="list-style-type: none"> <li>• Including 55nm</li> <li>• 2011: 1 design case, has been in mass production</li> </ul>	Continued to design and mass produce the chips required by multimedia big firms.
	Game Machine	<ul style="list-style-type: none"> <li>• Including 90nm/65nm/40nm/28nm</li> <li>• 2012: 1 design case, has been in mass production</li> </ul>	Continued to design and mass produce the chips required by video game machine big firms.
	SSD Device	<ul style="list-style-type: none"> <li>• Including 28nm/16nm</li> <li>• 2019: 2 design cases, have been in mass production</li> <li>• 2020: 1 design case, has been in mass production</li> </ul>	Continued to design and mass produce the chips required by SSD storage device big firms.

Niche Market Category	Bitcoin/Litecoin Mining Machine	<ul style="list-style-type: none"> <li>• Including 28nm/20nm/16nm/14nm/12nm/7nm</li> <li>• 2013: 3 design cases, have been in mass production</li> <li>• 2014: 5 design cases, have been in mass production</li> <li>• 2015: 2 design cases, have been in mass production</li> <li>• 2018: 2 design cases, have been in mass production</li> <li>• 2019: 2 design cases, have been in mass production</li> </ul>	<ul style="list-style-type: none"> <li>• Design and mass produce the world's fastest Bitcoin mining 28nm chip for Swedish company; complete the design of next-generation 16nm chip.</li> <li>• Design the chips for a number of Chinese mining equipment &amp; machinery manufacturers.</li> </ul>
	Game Machine	<ul style="list-style-type: none"> <li>• Including 28nm</li> <li>• 2014: 1 design case, has been in mass production</li> <li>• 2016: 1 design case</li> </ul>	Design and mass produce the 28nm game machine graphics chip for Japanese big firms.
	Medical Imaging Equipment	<ul style="list-style-type: none"> <li>• Including 130nm/28nm</li> <li>• A total of 3 design cases, have been in mass production</li> </ul>	Design and mass produce the chips for Japan's medical device big firm.
	Security System Equipment	<ul style="list-style-type: none"> <li>• Including 180nm</li> <li>• 2010: 1 design case, has been in mass production</li> <li>• 2012: 1 design case, has been in mass production</li> <li>• 2013: 1 design case, has been in mass production</li> </ul>	Design and mass produce the chips for several security equipment big firms.
	Factory Automation Equipment	<ul style="list-style-type: none"> <li>• Including 130nm</li> <li>• A total of 1 design case, has been in mass production</li> </ul>	Design and mass produce the chips for factory automation equipment big firms.
Others Category	Automobile Electronics Equipment	<ul style="list-style-type: none"> <li>• Including 180nm/16nm</li> <li>• 2011: 1 design case, has been in mass production</li> <li>• 2012: 1 design case, has been in mass production</li> <li>• 2019: 1 design case, has been in mass production</li> </ul>	Design and mass produce the chips for Japan's system big firms.

(1) Success cases – tier-one system companies

A. AC Company: One of Top Green 500 HPC supercomputer system firms in Japan has cooperated with Alchip in 2019 to produce chips.

B. AE Company: The NA Company has cooperated with Alchip to produce 7nm artificial intelligence chips in 2019.

C. AB Company: The Japanese Company has cooperated with Alchip to produce 7nm niche chips in 2020.

### 5.1.4 Long-term and short-term business development plans

In the future, Alchip will still continue to focus on its core businesses – R&D, design and manufacturing in high-end processing SoC, and work closely with world-class manufacturing suppliers to improve Taiwan’s international status in the chip design industry through leading technologies. The Company’s short- and long-term business development plans are described in three aspects of R&D, business, and production as follows.

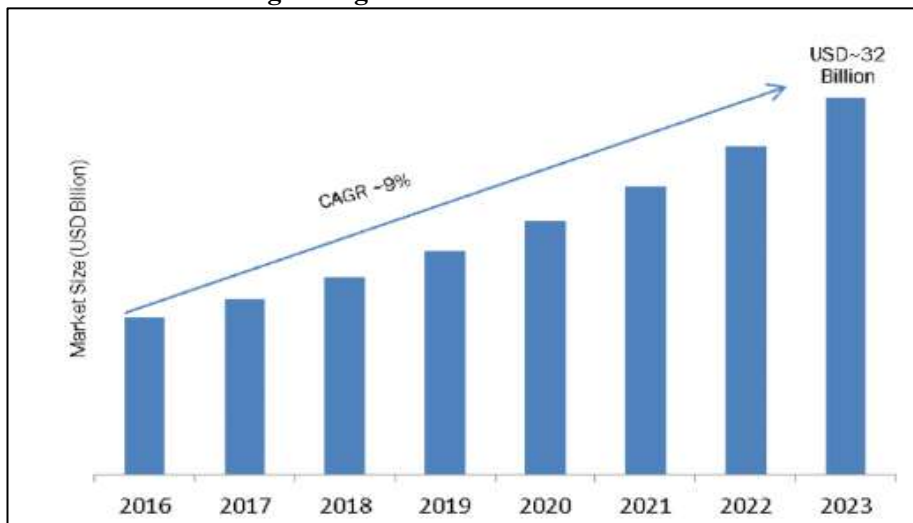
Item	Short-term business development plan	Long-term business development plan
R&D	<ol style="list-style-type: none"> <li>1. Provide service for custom digital/analog circuits.</li> <li>2. Optimize design procedures and shorten design Turn Around Time (TAT).</li> <li>3. Strengthen capability and quality of SoC design for advanced process node.</li> <li>4. Invest in R&amp;D for power saving design technologies.</li> <li>5. Improve DFT/DFM strategy for better predictability and controllability of mass-production cost.</li> </ol>	<ol style="list-style-type: none"> <li>1. Expand Silicon Intellectual Property library by investing in R&amp;D of high-end custom digital/analog circuit..</li> <li>2. Collaborate with foundries for early deployment of SoC design in advanced process node</li> <li>3. Continuously standardize design procedure in order to shorten design TAT and maximize resource allocation efficiency.</li> <li>4. Improve performance and energy saving of silicon intellectual property such as ARM high-end processors.</li> <li>5. Enhance SoC front-end design service and develop various application platforms.</li> <li>6. Provide system-level verification service, such as SI/PI/Thermal, to ensure customer’s fast system bring-up.</li> </ol>
Business	<ol style="list-style-type: none"> <li>1. Focus on system customers, and choose products with a high market potential, especially in HPC/AI related products.</li> <li>2. Introduce the existing products of system customers into the advanced process to reduce costs and power consumption.</li> <li>3. Increase the system integration such as SoC or SiP.</li> <li>4. Develop customers through market orientation, find customers with the development potential, and focus on customers of four domains of the Company.</li> </ol>	<ol style="list-style-type: none"> <li>1. Build service bases for major customers in the world, thoroughly develop long-term partnerships with customers and core technologies, and visibility and market share</li> <li>2. Strengthen the strategic alliance with silicon intellectual property suppliers and long-term partnerships.</li> <li>3. Working with customers to develop various application platform architecture, help customers establish cooperative alliances, and increase the competitiveness of system integration e.g. SoC or SiP.</li> <li>4. Continue to enhance the cooperation between the upstream and downstream firms, and broaden the scope to include market information.</li> </ol>
Production	<ol style="list-style-type: none"> <li>1. Enhance the cooperation among the upstream, midstream, and downstream.</li> <li>2. Provide customers with high-quality supply chain management to create the added value of the production.</li> <li>3. Build long-term partnerships with foundries.</li> </ol>	<ol style="list-style-type: none"> <li>1. Strengthen the link between design and production, continuously reduce production costs, and improve the defect-free rate.</li> <li>2. Provide customers with higher-quality supply chain management and more professional back-end consulting capability to create added values of production.</li> <li>3. Build long-term close partnerships with foundries, including verification and R&amp;D in the Silicon Intellectual Property.</li> </ol>



## 5.2 Market and Sales Overview

### 5.2.1 Market analysis

#### A. The market size of ASIC is growing

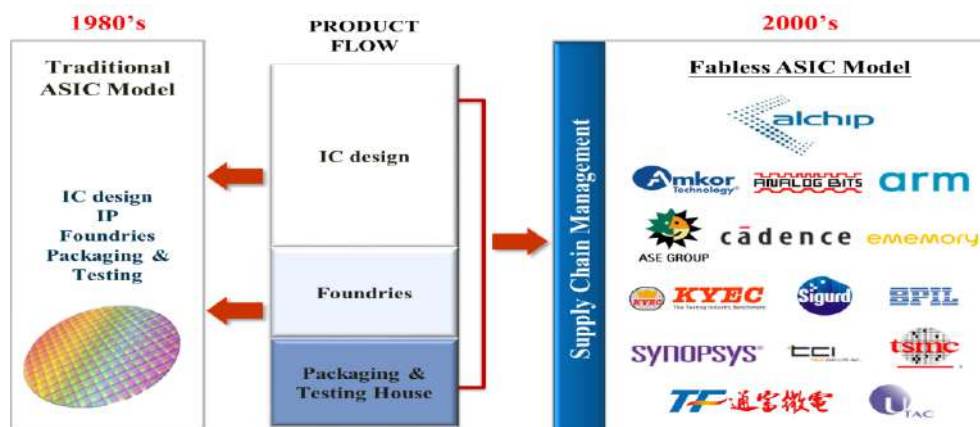


Source: MRFR Analysis, January 2019

Since its invention, semiconductors have been developed for 60 years. Looking at the development of the semiconductor industry after entering the generation of deep submicron, there are three key trends: the business model from system companies' vertical integration to specialization and division of labor nowadays; process technology following Moore's Law developed to date already moving towards 7nm (and more advanced) process node; system products adopting package stacking technology (SiP) and integrated System-on-Chip (SoC) mode to achieve the greatest market competitiveness.

#### (1) Trend I: The industry with specialization and division of labor

The semiconductor industry was mainly a closed production system vertically integrating the upstream, midstream, and downstream until the early 1980s, and the system company undertakes to do everything by itself. The pure play foundry business model was formally established with the foundation of the first pure-play foundry, TSMC, and UMC in 1987. After 2000, the specialization and division of labor in the semiconductor industry is increasingly apparent except that large IDMs still have IC design and foundries. Today, system companies concentrate on the R&D in core technology and engagement in brand marketing, and give the back-end design and production supply chain management to fabless ASIC companies. The fabless ASIC companies allied with their strategic partners to form the industry with specialization and division of labor.



- (2) Trend II : High-end process takes the place of low-end process  
ASIC design seeks the high-end process to reduce costs, power consumption and size. According to a recent report published by Allied Market Research, the global ASIC chip market was valued at \$14.87 billion in 2018, and is projected to reach \$28.05 billion by 2026, registering a CAGR of 8.61% from 2019 to 2026.
- (3) Trend III: The system integration gradually moves to SoC (system design) / SiP (Packaging technology)  
System products are faced with intense market competition. Shorter development time and cost effective design are the primary requirements of customers. ASIC design is not only SiP integration but also a system-level integration. To pursue the high-end process, we have to take the chip packaging and testing technology into account to gain the competitive advantage of cost, power consumption, and volume. In response to the whole new SoC, it may be required to take a lot of time and money, which results in the SiP package stacking technology. Compared with the traditional IC packaging, the SiP package stacking technology can reduce design time, increase packaging density, lower risks, and save system costs. In the future, the SoC will gradually move towards the cross-platform collaboration to make the most competitive integration across platforms through SiP / SoC integration mode.
- (4) Trend IV: System manufacturers will gradually move towards outsourcing ASIC design and production  
Under the pressure from functional diversity and cost competitiveness, major manufacturers of system products with large demand in markets, such as cameras, tablet PCs, smart phones, etc. have to face cost pressures and future competitiveness. Therefore, they begin to think about the adoption of self-developed ASIC strategy in order to gain advantages of differentiation and competitiveness. System manufacturers will concentrate more on keeping core firmware in hand and gradually move towards outsourcing ASIC design and production in terms of software technology.

## B. Sales by region

Unit:NT\$thousand

Regions of sales	2019		2020	
	Amount	%	Amount	%
Taiwan	260,117	6.00	290,651	4.11
Japan	758,097	17.50	1,041,424	14.71
Mainland China	2,611,565	60.29	4,563,634	64.47
Europe	53,608	1.24	505,645	7.14
United States	644,164	14.87	672,600	9.50
Others	4,405	0.10	4,965	0.07
Total	4,331,956	100.00	7,078,919	100.00

## C. Market share

According to financial information bulletins of companies, the total sales of the domestic design service industry was approximately NT\$26.1 billion in 2020. The Company's operating revenue was approximately NT\$7.08 billion, with market share of 27.07% ranked as the third.

## D. Demand and Supply Conditions for the Market in the Future, and Market Growth Potential

With applications of SoC more widely and diverse needs of end products, IC manufacturers and IC design companies clearly sense that their design productivity is far less than the process technology advanced. To achieve purposes of faster time to market and lower IC design costs, system manufacturers must work with fabless ASIC companies with the capability to integrate various Silicon Intellectual Property. As a result, the demand for fabless ASIC will grow more and more.

From the perspective of growth in all regions, Asia-Pacific region remains the center of future growth, driven by the growth momentum coming from the huge domestic market in Mainland China. In addition, we will endeavor to expand our share of the North America market. The Company constantly researches and develops the design process and technology of advanced processes (28 nm and below) over a long period of time, makes improvements on the use of general commercial software for R&D design (EDA), and enhances its supplier chain management to make products of customer groups lead the market through abundant design resources and technical support while the Company's operating revenue increasing in 2020.

## **E. Competitive Niche**

### **(1) High-end process experience:**

Currently the technical experience of fabless ASIC companies for the most part still remains in 90nm node and above. The design team of Alchip focuses on the design cases with high complexity (over 20 million gates) for advanced processes (28nm and below), develops and mass produces a series of System on Chip successfully for world-class system companies. It can effectively overcome challenges from electrical closure (including power management, timing convergence, system interface, and signal completeness), Design for Test (DFT), Design for Manufacturing (DFM), or the system-level, and further shorten the design time and enhance the efficiency of chips to help customers reduce costs, increase production efficiency, decrease power consumption, and optimize of chip size.

### **(2) Customization service:**

To satisfy customer needs, the Company provides moderate flexibility and creates customized design for customers. Alchip recognizes its market position in SoC design with high complexity for advanced processes. It always has a full communication and understanding first for any customer's requirement, offers all-round services from design to mass production, and includes Silicon Intellectual Property required by products of customers going on the market for the future in the Company's R&D plan and prepares them in advance to shorten the design time in the future.

### **(3) Quality Assurance:**

Alchip's goal is to develop and provide the highest-quality solutions to customers, achieve the highest standard of excellence, and continue to boost creativity. To help customers seize the market opportunity, the Company introduces the Design for Test (DFT) method in the design stage. The hardware circuit is additionally installed on a chip, which allows the faults and manufacturing defects to be detected when testing the chip, and further the testing cost is reduced and the defect-free rate of chip mass production is improved, making all tasks certain to be completed rapidly and effectively and reducing risks in IC design. Meanwhile, Alchip also implements strict quality policies, continuously reviews and enhances its services in order to complete tasks given by customers in a time-sensitive, highly cost-effective manner and ensure products and quality meeting customers' requirements.

### **(4) Master the advanced process design technologies:**

The Company's core team masters design capabilities of advanced processes, and has quite the understanding of the variability in advanced processes. Risks resulting from the lack of the variability in advanced processes of general commercial EDA software can be properly predicted and prevented. It is more complex for advanced processes systems. In the chip design and packaging process, the system analysis is also taken into consideration to ensure the predictability that customers get chips integrated into systems, such as: Signal Integrity (SI) and Power Integrity (PI). Alchip's advanced process design solutions have also obtained empirical results from more than 200 million units of mass-production chips. After adoption of Alchip's design programs, customers can complete product design goals in the shortest time and gain the cost-effectiveness under high-volume mass production.

### **(5) Reliability:**

High-complexity SoC design faces challenges in reliability, quality, cost, and time for products to market. The Company has completed more than 420 design projects since its establishment in 2003, and obtained the world's and system company's quality certification. Regardless of high-end system chips, high-complexity chips, and advanced-process chips, success has been achieved for all wafer start at the first attempt by far. Alchip considers environment variation factors that may occur at early design stage of circuits to reduce time and costs in re-designs and re-spins, and achieve high defect-free rate. Alchip accomplishes the reliability assurance through careful planning and implementation, concentration on the reliability, pre-sale support, and continuous improvement in the reliability for related products.

(6) Long-term customer relationships and strategic alliance partners:

The Company has long-term relationships with all customers, and pursues shared goals for better, faster results and lower costs. In respect of supply chain management, it also maintains good partnership with upstream and downstream strategic partners, and provides customers with complete solutions and products that are more competitive.

## **F. Advantages, disadvantages and responsive strategies in the development of perspective**

(1) Advantageous factors:

- i. Complete supply chain of Taiwan's semiconductor industry: The semiconductor has division of labor based on specialization and close relationship between upstream and downstream. Taiwan has advanced-process wafer fab, packaging, and testing houses and complete satellite suppliers, which has a comparative advantage in the development of IC design services. Besides, the convenience of location attracts manufacturers around the globe to place orders in Taiwan in view of the first-class international competitiveness.
- ii. Heavy demand for semiconductor products from Taiwan: Taiwan's OEM/ODM business mode has very high production efficiency and economies of scale in sub-contract manufacturing for not only semiconductor but also system products. Therefore, there is a huge demand in Taiwan's domestic market to support orders from foreign manufacturers. As a whole, the semiconductor industry has been driven largely by demand from high-performance computing, artificial intelligence, 5G networks, self-driving cars. With the strong demands in high-end design chips, the industry prospects is expected to have a promising outlook.
- iii. Support by government policy: The electronics industry has been strongly supported by the government through investments OEM/ODM in the semiconductor sector, and fostering information technology, consumer electronics, and IC manufacturing industries. Thus, talented people and industrial structure are both beneficial for long-term development.

(2) Disadvantageous factors and responsive measures:

- i. Since engineers with advanced-process experience are very few, talented people are not easy to find and develop. Retaining professional personnel has become increasingly competitive because of the flourishing of IC industry. Companies often have to pay a high price for recruiting outstanding talents. As a result, to enhance employees' cohesion and sense of belonging towards the Company, the Company has to pay higher cost of human resource.

**【Responsive Measure】**

- ① The Company develops its own talents over a long period through internal and external professional education and training as well as on-the-job training, and improves employee benefits and reduces turnover rate.
- ② Adoption of employee stock options to keep talents.

- ii. As the industry looks promising and the high demands of design resource, the Company needs to steadily expand its resources to improve service quality. Additionally, IDM industry mode is no longer competitive. The market trend for system customers to look for partners is becoming more and more obvious. Currently, the design service industry is limited in size, and requires expanding its scale to gain big orders from world-class system companies.

**【Responsive Measure】**

- ① Simplify the development and design process to improve productivity.
- ② Build the application specific Silicon Intellectual Property platform to shorten the design time and resource input.

## 5.2.2 Main Product Application and Production Flow

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### A. Main product application

Alchip's major products are divided into three categories:

- (1) AI/HPC/Communication market: The market for network, storage, and computing devices is growing. To meet higher standards for performance, these devices must use increasingly complex high-efficiency and high-density System on Chips. The company has completed a number of high-performance computing (HPC) design chips with Japanese system company, and the design cases ranked top of the Green500. In addition, it has also completed a number of high-performance computing projects with the CPU manufacturers in China. In the US and Europe regions, the company has also provided advanced process chip design and mass production for the HPC and AI customers.
- (2) Consumer electronics products: including designs for applications such as HDTV, mobile phones, digital cameras/video cameras, entertainment systems, portable media players, tablet PC master chips, and peripheral chips. Among which, mobile communication devices have integrated with features of MP3, camera, GPS, mobile TV, wireless surfing, gaming machine, etc., and they will become a personal finance and identification tool in the future. In the semiconductor sector, the consumer market is the fastest growing segment. In response to the fierce competition in the market, Alchip provides predictable chip realization time, adopts the applied efficiency circuits with empirical experiences, completes prototype chips and enters mass production as soon as possible so that customers can get maximum returns on their investments.
- (3) Niche market products: including ASIC design in special applications such as surveillance systems, entertainment machines, and medical equipment and instruments.

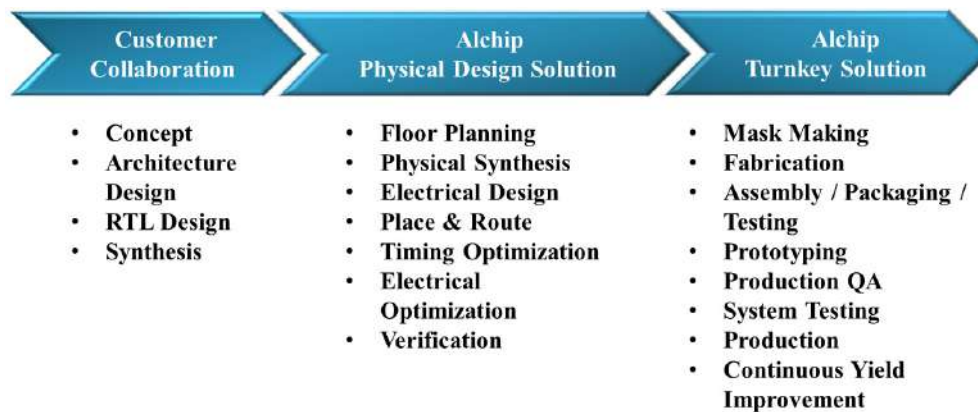


## B. Production process of major products:

Chip design is composed of front-end design and back-end design. The front-end design is provided by the system company, and back-end design, production, and manufacturing, on the other hand, are subcontracted to Alchip.

At the front-end design, the concept of a product is decided by the customer. RTL (Register Transform Level) is used to describe functions required by IC and determine the operating speed of the product. Finally, the target database containing all the details (basic functional logic) is established. Through the use of synthesis software, RTL is converted to net list, in which, electronic circuits are converted to logic gates, and the function defined therein is realized through Synthesis Software while the operating clock defined by designer is optimized, and the completed design is given to the fabless ASIC supplier for back-end design.

The back-end design is divided into two phases. The first phase begins with the initialization of the design case and ends in receipt of customer's final net list. In the second phase, the engineers use physical design software to convert Net List to the actual layout, and generate the file named GDSII for manufacturing masks (commonly known as tape out). Taking 7nm case as an example, it takes more than a half year in the first phase, and it takes about 12 to 16 weeks in the second phase.



Alchip provides not only the back-end design service, but also a complete turn-key service from design to wafer fabrication, packaging, and testing for customers. In Alchip's service process, the wafer fabrication phase begins after delivery of GDSII file to foundries for manufacturing. The period from delivery of GDSII to completion of chip's finished product testing for a 16nm case takes about 8 to 12 weeks. For a 7nm case, it takes about 16 to 20 weeks. The chip manufacturing process is roughly divided into the following steps: wafer fabrication (wafer fab for short), wafer probe, assembling, initial test and final test. Alchip builds close working relationships with suppliers for overall back-end design and production.

- (1) Silicon Intellectual Property suppliers: Alchip works closely with silicon intellectual Property suppliers and seeks the most appropriate capacity/price ratio. Alchip can provide products of principal IP suppliers around the globe. Customers can adopt their own IP and then combine them flexibly with IP provided by Alchip.
- (2) Foundries: Alchip chooses cooperative firms based on customer's needs. Alchip adopts the open foundries business mode that it does not need to depend on the limited design capability and development of a fixed foundry. The Company keeps good partnerships with most foundries (such as: TSMC, Samsung, SMIC, Global Foundries, etc.). It also cooperates closely with TSMC in R&D at the back-end design for deep-submicron and high-end processing SoC.

- (3) Packaging/testing house: Considering the packaging/testing when manufacturing products, in the early design stage, the manufacturing & production team and design & engineering team of Alchip will work together with customers and packaging/testing houses in the supply chain and ensure that each part is correct in the process of commercialization. In the meantime, the logistics group of Alchip makes chips produce timely and delivers them to customers through sound planning production process, and good interaction with supply chain companies.

The following is a list of individual suppliers in the semiconductor industry chain:

Foundry	
Packaging & Testing House	
SIP Supplier	 (over 30 partners)

### 5.2.3 Raw Material Supply

Main raw material	Main source	Supply status
Wafer	Taiwan	Good

### 5.2.4 Major suppliers and customers

#### A. Major suppliers accounting for more than 10% of total purchase amount in years 2020 and 2019

Unit: NT\$ thousand

Item	2019				2020			
	Supplier	Amount	Percentage of full-year net purchase (%)	Relationship with the issuer	Supplier	Amount	Percentage of full-year net purchase (%)	Relationship with the issuer
1	TSMC	963,060	100.00	None	TSMC	1,949,391	100.00	None

Explanation: Alchip is a professional IC design company, and its main purchase item is wafer. Alchip pursues quality and ensures delivery time, and has the long-term cooperation and builds stable partnership with wafer foundries.

#### B. Major customers contributing more than 10% of total sales amount in years 2020 and 2019

Unit: NT\$ thousand

Item	2019				2020			
	Customer	Amount	Percentage of full-year net sales (%)	Relationship with the issuer	Customer	Amount	Percentage of full-year net sales (%)	Relationship with the issuer
1	S Company	1,208,388	27.89	None	S Company	2,791,567	39.43	None
2	Y Company	817,391	18.87	None	Y Company	(Note)	(Note)	None

Note: Revenue from the customer for the indicated period was less than 10% of the Company's revenue.



Explanation: The increase in the sales amount of S Company was resulting from revenue recognition of the increase of chip production. The decrease in the sales amount of Y Company was resulting from the decrease in design service in 2020.

### 5.2.5 Production output in years 2020 and 2019

Unit: thousand; NT\$ thousand

Output	Year	2019		2020	
		Quantity	Value	Quantity	Value
Major Products					
ASIC and Chip production		9,240	2,375,528	9,947	4,297,871
NRE		(Note)	10,904	(Note)	32,892
Others		69	2,357	329	3,130
Total		9,309	2,388,789	10,276	4,333,893

Note: Alchip is a professional IC design company, and has no its own wafer fabrication capacity. The capacity of general manufacturing industry is not applicable. NRE refers to IC design services coming into contract. Since contract for cost input is different to each project, it is not applicable to calculation of quantity and value.

### 5.2.6 Sales amount in years 2020 and 2019

Unit: NT\$ thousand

Shipments & Sales	Year	2019				2020			
		Domestic sales		Overseas sales		Domestic sales		Overseas sales	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Major Products									
ASIC and Chip production		2,497	260,117	6,852	4,054,136	2,876	290,651	6,880	6,612,878
NRE		-	-	(Note)	13,372	-	-	(Note)	169,578
Others		-	-	66	4,331	-	-	332	5,812
Total		2,497	260,117	6,918	4,071,839	2,876	290,651	7,212	6,788,268

Note: NRE refers to IC design services coming into contract. Since contract for cost input is different to each project, it is not applicable to calculation of quantity and value.

### 5.3 Information on Employees

The Company's number of employees employed, their average years of service, average age, the percentage of employees at each education level for the two most recent years:

Year		2019	2020	The Current Year up to March 31, 2021
Number of Employees	Supervisor of Managerial Level or Above	102	131	132
	General staff	302	295	291
	Total	404	426	423
Average age		32.3	33.5	33.9



Average years of service		5.5	6.5	6.6
Percentage of Employees at Each Education Level	Ph.D.	1%	1%	1%
	Master	31%	35%	35%
	College	65%	62%	63%
	Senior High School and below (inclusive)	3%	2%	1%

## 5.4 Expenditure on Environmental Protection

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

## 5.5 Labor Relations

### 5.5.1 Describe employee benefit plans, continuing education, training, retirement systems, and the status of their implementation, and labor-management agreements and measures for upholding employees' rights and interests

#### A. Employee benefit plans

The Group's employee benefit plans are implemented in accordance with relevant laws and regulations where subsidiaries are located, including labor and health insurance, group insurance, pension distribution, and annual physical examination. The subsidiaries of the Group also establish employee welfare committees responsible for planning and handling employees' welfare matters including cash gifts for holidays and festivals, outing and related activities and year-end party.

#### B. Continuing education and training

To enhance employees' professional capabilities and achieve the company's goals in cultivation of talent, the Company makes annual training programs for employees based on the Company's development strategy and employees' needs, scrupulously implements training, and conducts reviews and auditing on training performance in accordance with ISO Standard for Training Management and Process.

#### C. Retirement systems and status of their implementation

Alchip's retirement systems are implemented in accordance with Labor Standards Act and Labor Pension Act of the republic of China to provide protection for employees' security.

#### D. Labor-management agreements and measures for upholding employees' rights and interests

The Group has always valued employees' rights and interests as well as their opinions. We keep labor relations harmonious, and employees may make communications and submit their suggestions on the company's operations through regular labor-management conference.

#### E. Employee safety and environment management

The Company fulfills the social responsibility and provides a safe working environment to the employees. The Company not only complies with the related regulations of occupational health and safety, but also sets

health and safety rules such as prevention of sexual harassment. The Company also pays attention to the following matters.

- Safe working environment  
In order to ensure the safety of the working environment, the employee of the Company has to use a key card to access the office, elevator and parking areas. Visitor of the Company should register and be led by the staff into the office. The main entrance of the office is monitored by a security system.
- Regular fire safety inspection  
In order to ensure that all fire equipment and sensors are maintained, the Company arranges yearly fire safety inspection. Moreover, the Company also arranges a yearly fire drill.
- Maintaining a hygienic environment
  - (1) Annual air conditioner maintenance.
  - (2) Bi-annual checking of carbon dioxide level.

**5.5.2 Describe any losses suffered by the company in the most recent 2 fiscal years and up to the annual report publication date due to labor disputes (including any violations of the Labor Standards Act found in labor inspection, specifying the disposition dates, disposition reference numbers, the articles of law violated, the substance of the legal violations, and the content of the dispositions), and disclosing an estimate of possible expenses that could be incurred currently and in the future and measures being or to be taken. If a reasonable estimate cannot be made, an explanation of the facts of why it cannot be made shall be provided**

In 2020 and 2021 as of the date of this annual report publication, there have been no losses resulting from labor disputes. However, the company was issued a fine due to violate labor law. Below is detailed information.

Violation of the provisions: Paragraph 1 of Article 24 of Labor Standards Act., Disposition Date: 13th January, 2021, Disposition Reference Number.: Taipei-Labor-10961190211, Contents of the Violation: Overtime work without paying overtime wages, Contents of the Disposition: Administrative fine of NT\$20,000 The Company has reviewed the working hour management and continuously communicated with department managers and employees to improve the overtime management.

**5.6 Material Contracts**

Supply and sales contracts, technical cooperation contracts, engineering/construction contracts, long-term loan contracts, and other contracts that would affect shareholders’ equity, where said contracts are either still effective as of the date of the publication of annual report, or expired in the most recent year are listed as follows:

**5.6.1 Alchip Technologies, Limited, Alchip(Holdco)**

Agreement	Counterparty	Start/end Dates of contracts	Major content	Restrictive clauses
Partner	F Company	One year from March 13, 2009 (automatically extended for one year annually)	F Company appointed Alchip (Holdco) as its “Value Chain Aggregator”.	None
Software licensing	G Company	From April 1, 2003 to this day	G Company licensed Alchip (Holdco) the right to use Licensed Products (and it signed an amendment to the contract of	None

			software license with Alchip (Holdco), Alchip (TW), Alchip (JP), Alchip (Wuxi), and Alchip (Shanghai) on October 31, 2019. G Company licensed Alchip (Holdco), Alchip (TW), Alchip (JP), Alchip (Wuxi), and Alchip (Shanghai) the right to use Licensed Products and patented technologies with expiration date on October 30, 2022).	
Technology licensing	G Company	From April 1, 2003 to this day	G Company licensed Alchip (Holdco) the right to use Licensed Products (and it signed an amendment to the contract of software license with Alchip (Holdco) and Alchip(Shanghai) on October 26, 2018. G Company licensed relevant patents on technologies to Alchip (Holdco) and Alchip(Shanghai) for use with expiration date on December 16, 2021).	None
Technology licensing	G Company	From April 1, 2003 to this day	G Company licensed Alchip (Holdco) the right to use Licensed Products (and it signed an amendment to the contract of software license with Alchip (Holdco) and Alchip(Shanghai) on May 6, 2019. G Company licensed relevant patents on technologies to Alchip (Holdco) and Alchip(Shanghai) for use with expiration date on May 5,2022).	None
Technology licensing	G Company	From April 1, 2003 to this day	G Company licensed Alchip (Holdco) the right to use Licensed Products (and it signed an amendment to the contract of software license with Alchip (Holdco) and Alchip(Shanghai) on October 28, 2019. G Company licensed relevant patents on technologies to Alchip (Holdco) and Alchip(Shanghai) for use with expiration date on October 27, 2022).	None
Technology licensing	G Company	From April 1, 2003 to this day	G Company licensed Alchip (Holdco) the right to use Licensed Products (and it signed an amendment to the contract of software license with Alchip (TW Branch) and Alchip(Shanghai) on April 29, 2020. G Company licensed relevant patents on technologies to Alchip(TW Branch) and Alchip(Shanghai) for use with expiration date on May 5, 2023).	None
Software licensing	H Company	From June 29, 2006 to the termination by H Company as agreed in the contract	H Company licensed Alchip (Holdco) the right to use Licensed Materials.	None

### 5.6.2 Alchip Technologies, Inc.,Alchip(Taiwan)

Agreement	Counterparty	Start/end dates of contracts	Major content	Restrictive clauses
Lease contract	CyberLink Corp.	From August 1, 2019 to July 31, 2024	Lease the property located in “9F., No. 12, Wenhua St., Neihu Dist., Taipei City” and “9F.-1, No. 12, Wenhua St., Neihu Dist., Taipei City” as office space.	None

### 5.6.3 Alchip Technologies, Limited,TW Branch

Agreement	Counterparty	Start/end dates of contracts	Major content	Restrictive clauses
Lease contract	TAI YUAN TESTILE	From January 1, 2019 to December 31, 2023	Lease the property located in “11F.-1, No. 1, Taiyuan 1st St., Zhubei Vil., Zhubei City, Hsinchu County” as office space.	None
Design and production	S Company	Five years from April 10, 2015 (auto-renew for additional 5 years)	Alchip (Holdco) provides product R&D services, manufactures, and sells integrated circuit products to S Company based on the Statement of Work attached with the contract.	None
Technology licensing	G Company	From April 1, 2003 to this day	G Company licensed Alchip (Holdco) the right to use Licensed Products (and it signed an amendment to the contract of software license with Alchip (TW Branch) and Alchip(Shanghai) on April 29, 2020. G Company licensed relevant patents on technologies to Alchip(TW Branch) and Alchip(Shanghai) for use with expiration date on May 5, 2023).	None

### 5.6.4 Alchip Technologies, Limited,Alchip(Shanghai)

Agreement	Counterparty	Start/end dates of contracts	Major content	Restrictive clauses
Technology licensing	G Company	From April 1, 2003 to this day	G Company licensed Alchip (Holdco) the right to use Licensed Products (and it signed an amendment to the contract of software license with Alchip (Holdco) and Alchip (Shanghai) on October 26, 2018. G Company licensed relevant patents on technologies to Alchip (Holdco) and Alchip (Shanghai) for use with expiration date on December 16, 2021.	None
Technology licensing	G Company	From April 1, 2003 to this day	G Company licensed Alchip (Holdco) the right to use Licensed Products (and it signed an amendment to the contract of software license with Alchip (Holdco) and Alchip(Shanghai) on May 6, 2019. G Company licensed relevant patents on technologies to Alchip (Holdco) and Alchip(Shanghai) for use with expiration date on May 5,2022).	None
Technology licensing	G Company	From April 1, 2003 to this day	G Company licensed Alchip (Holdco) the right to use Licensed Products (and it signed an amendment to the contract of	None

			software license with Alchip (Holdco) and Alchip(Shanghai) on October 28, 2019. G Company licensed relevant patents on technologies to Alchip (Holdco) and Alchip(Shanghai) for use with expiration date on October 27, 2022).	
Technology licensing	G Company	From April 1, 2003 to this day	G Company licensed Alchip (Holdco) the right to use Licensed Products (and it signed an amendment to the contract of software license with Alchip (TW Branch) and Alchip(Shanghai) on April 29, 2020. G Company licensed relevant patents on technologies to Alchip(TW Branch) and Alchip(Shanghai) for use with expiration date on May 5, 2023).	None
Lease contract	10 Landlords	From July 1, 2019 to June 30, 2022	Lease the property located in “11F, East Building, Greenland Center, No. 596, Middle Longhua Rd., Xuhui District, Shanghai City” as office space.	None

## VI. Financial Highlights

### 6.1 Consolidated Balance Sheets

Unit: NT\$ thousand

Item		2016	2017	2018	2019	2020
Current assets		2,266,456	2,332,005	2,883,785	4,108,247	7,693,440
Property, Plant and Equipment		216,976	269,326	316,836	389,422	814,549
Intangible assets		117,058	87,192	146,759	221,553	123,696
Other Non-Current assets		18,621	16,800	16,326	14,987	15,968
Total assets		3,288,650	3,115,918	3,717,404	5,225,066	9,112,980
Current liabilities	Before distribution	731,082	358,056	768,574	1,815,666	5,131,391
	After distribution	731,082	422,064	859,259	2,029,777	(Note)
Non-current liabilities		-	43,417	27,931	107,655	93,347
Total liabilities	Before distribution	731,082	401,473	796,505	1,923,321	5,224,738
	After distribution	731,082	465,481	887,190	2,137,432	(Note)
Equity attributable to owner of the company		2,557,568	2,714,445	2,920,899	3,301,745	3,888,242
Share capital		607,028	610,010	597,731	606,129	620,285
Capital surplus		1,388,223	1,425,312	1,456,360	1,534,620	1,684,359
Retained earnings	Before distribution	421,432	730,175	821,922	1,164,749	1,785,555
	After distribution	421,432	666,167	731,237	950,638	(Note)
Other equity		140,885	(51,052)	44,886	(3,753)	(201,957)
Treasury stock		-	-	-	-	-
Non-controlling interest		-	-	-	-	-
Total equity	Before distribution	2,557,568	2,714,445	2,920,899	3,301,745	3,888,242
	After distribution	2,557,568	2,650,437	2,830,214	3,087,634	(Note)

Note : Pending on the approval of 2021 shareholders' meeting.

## 6.2 Consolidated Statements of comprehensive income

Unit: NT\$ thousand

Item	2016	2017	2018	2019	2020
Operating revenues	3,690,977	4,265,643	3,450,678	4,331,956	7,078,919
Gross profit	487,833	1,201,130	1,291,441	1,611,042	2,307,267
Profit (loss) from operations	(209,745)	320,051	321,925	432,878	987,143
Non-operating income & expenses	8,432	38,934	12,880	92,405	98,647
Profit(loss) before income tax	(201,313)	358,985	334,805	525,283	1,085,790
Net profit(loss) from operations of continued segments	(211,396)	308,743	257,357	433,512	834,917
Net profit(loss)	(211,396)	308,743	257,357	433,512	834,917
Other comprehensive income(loss) (net of income tax)	(15,877)	(191,937)	81,936	(48,639)	(198,204)
Total comprehensive income(loss)	(227,273)	116,806	339,293	384,873	636,713
Net income attributable to shareholders of the parent	(211,396)	308,743	257,357	433,512	834,917
Net income attributable to non-controlling interest	-	-	-	-	-
Comprehensive income attributable to Shareholders of the parent	(227,273)	116,806	339,293	384,873	636,713
Comprehensive income attributable to non-controlling interest	-	-	-	-	-
Earnings(loss) per share (NT\$)	(3.45)	5.08	4.22	7.20	13.61

## 6.3 CPA opinions from 2016 to 2020

Year	CPA	Accounting Firm	Auditor's Opinion
2016	Cheng-Ming Lee, S.C. Huang	Deloitte & Touche	Unqualified opinion
2017	Cheng-Ming Lee, S.C. Huang	Deloitte & Touche	Unqualified opinion
2018	Yi-Wen Wang, Cheng-Ming Lee	Deloitte & Touche	Unqualified opinion
2019	Yi-Wen Wang, Cheng-Ming Lee	Deloitte & Touche	Unqualified opinion
2020	Yi-Wen Wang, Shih-Tsung Wu	Deloitte & Touche	Unqualified opinion

## 6.4 Five -Year Financial Analysis

Item		2016	2017	2018	2019	2020
Financial structure	Debt ratio(%)	22.23	12.88	21.43	36.81	57.33
	Ratio of long-term capital to property, plant and equipment(%)	1,178.73	1,023.99	930.71	875.50	488.81
Liquidity	Current ratio (%)	310.01	651.30	375.21	226.27	149.93
	Quick ratio (%)	273.68	603.09	322.36	189.67	111.00
	Interest earned ratio (times)	(58.83)	198.79	376.76	117.32	275.61
Operating performance	Accounts receivable turnover (times)	4.00	6.00	6.26	5.37	9.08
	Days sales outstanding	91	61	58	68	40
	Inventory turnover (times)	12.20	17.09	9.20	5.49	5.67
	Accounts payable turnover (times)	16.40	18.43	23.67	9.88	12.20
	Average inventory turnover days	30	21	40	66	64
	Property, plant and equipment turnover (times)	11.16	17.54	11.77	12.27	11.76
	Total assets turnover (times)	1.02	1.33	1.01	0.97	0.99
Profitability	Return on total assets (%)	(5.79)	9.69	7.55	9.78	11.69
	Return on equity (%)	(7.85)	11.71	9.13	13.93	23.22
	Pre-tax income to paid-in capital (%)	(33.16)	58.85	56.01	86.66	175.05
	Net margin(%)	(5.73)	7.24	7.46	10.01	11.79
	Basic earnings per share (NT\$)	(3.45)	5.08	4.22	7.20	13.61
Cash flow	Cash flow ratio (%)	73.22	347.00	132.66	91.67	88.75
	Cash flow adequacy ratio (%)	99.43	118.46	112.50	122.29	155.93
	Cash reinvestment ratio (%)	12.57	27.04	16.64	26.07	61.87
Leverage	Operating leverage	(6.87)	5.32	6.15	5.80	3.60
	Financial leverage	0.98	1.01	1.00	1.01	1.00

Analysis for the changes that exceed 20% in the past two years

- (1) Debt Ratio increased by 55.75%, mainly due to the increase in receive in advance from customer in 2020.
- (2) Ratio of long-term capital to property, plant and equipment decreased 44.17%, mainly due to the increase in purchase of machinery in 2020.
- (3) Current Ratio, Quick Ratio decreased by 33.74% and 41.48%, respectively, mainly due to increase in receive in advance from customer in 2020 .
- (4) Interest Coverage Ratio increased by 134.92%, mainly due to increase in net profit in 2020.
- (5) Accounts Receivable Turnover (times), Days sales outstanding increased 69.09% and decreased 41.18%, respectively, mainly due to increase in operating revenues in 2020.
- (6) Accounts Payable Turnover Rate increased by 23.48%, mainly due to increase in cost of good sold in 2020.
- (7) Return on Equity, Pre-tax income to paid-in capital, EPS increased by 66.69%, 102% and 89.03% , respectively, mainly due to increase of net profit in 2020.



- (8) Cash flow adequacy ratio ,Cash reinvestment ratio increased by 27.51% and 137.31%, respectively, mainly due to increase in net profit, increase in cash generated from operating activities in 2020.
- (9) Operating leverage decreased by 37.93%, mainly due to increase in cost of good sold in 2020.

Note1: Financial analysis equations:

1. Financial structure
  - (1) Ratio of liabilities to assets= Total liabilities/Total assets
  - (2) Ratio of long-term assets to Property, plant and equipment=(total equity+non-current liabilities)/ property, plant and equipment, net
2. Solvency
  - (1) Current ratio=Current assets/Current liabilities
  - (2) Quick ratio=(Current assets-inventory-prepaid expense)/Current liabilities
  - (3) Multiple of interest protection=income tax and interest expenses net income before income tax/interest expenses in the current period
3. Operating ability
  - (1) Account receivable turnover(times)=Net sales/Average accounts receivable and notes receivable(net)
  - (2) Days sales in account receivable=365/Account receivable turnover(times)
  - (3) Inventory turnover= Cost of goods sold/Average inventory
  - (4) Payables (including accounts payable and notes payable resulting from operation) turnover = net sales / balance (gross) of average accounts payable (including accounts payable and notes payable resulting from operation)
  - (5) Average days in sales=365/Inventory turnover
  - (6) Property, plant and equipment turnover(times)=Net sales/ net sales/average property, plant and equipment, net
  - (7) Total assets turnover=Net sales/Average assets
4. Profitability
  - (1) Ratio of return on total assets=[net income+interest expense(1-tax rate)/Average assets]
  - (2) Ratio of equity= Net income/Average total Equity
  - (3) Profit ratio=New income/Net sales
  - (4) Earnings per share=(Net income- preferred stock dividend)/Weighted average stock issued (Note 4)
5. Cash flow
  - (1) Cash flow ratio=Net cash flow from operating activity/Current liabilities
  - (2) Cash flow adequacy ratio=Net cash flow from operating activities in five years/(Capital expenditure+inventory increase+cash dividend) in five years
  - (3) Cash reinvestment ratio=(Net cash flow from operating activity –cash dividend)/ gross of property, plant and equipment+long-term investment+other non-current assets+working capital)(Note 5)
6. Leverage
  - (1) Operation leverage=(Net operating income-operating cost and expense)/Operating income (Note 6)
  - (2) Financial ratio= Operating income/(Operating income-Interest expense)

Note 2: When the above formula for calculation of earnings per share is used during measurement, give special attention to the following matters:

1. Measurement should be based on the weighted average number of common shares, not the number of issued shares at year end.
2. In any case where there is a cash capital increase or treasury stock transaction, the period of time in circulation shall be considered in calculating the weighted average number of shares.
3. In the case of capital increase out of earnings or capital surplus, the calculation of earnings per share for the past year and the half-year shall be retrospectively adjusted based on the capital increase ratio, without the need to consider the issuance period for the capital increase.
4. If the preferred shares are non-convertible cumulative preferred shares, the dividend of the current year (whether issued or not) shall be subtracted from the net profit after tax, or added to the net loss after tax. In the case of non-cumulative preferred shares, if there is net profit after tax, dividend on preferred shares shall be subtracted from the net profit after tax; if there is loss, then no adjustment need be made.

Note 3: Give special attention to the following matters when carrying out cash flow analysis:

1. Net cash flow from operating activities means net cash in-flows from operating activities listed in the statement of cash flows.
2. Capital expenditures means the amounts of cash out-flows for annual capital investment.
3. Inventory increase will only be entered when the ending balance is larger than the beginning balance. An inventory decrease at year end will be deemed zero for calculation.
4. Cash dividend includes cash dividends from both common shares and preferred shares.

5. Gross fixed assets value means the total value of fixed assets prior to the subtraction of accumulated depreciation.

Note 4: Issuers shall separate operating costs and operating expenses by their nature into fixed and variable categories. When estimations or subjective judgments are involved, give special attention to their reasonableness and to maintaining consistency.

Note 5: In the case of a company whose shares have no par value or have a par value other than NT\$10, for the calculation of the above-mentioned paid-in capital ratio, the ratio of equity attributable to owners of the parent as stated in the balance sheet shall be substituted.

## 6.5 Audit Committee's Review Report

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### **Alchip Technologies, Limited AUDIT COMMITTEE'S REVIEW REPORT**

To: Shareholders' Annual General Meeting for Year 2021, Alchip Technologies, Limited

The Board of Directors has prepared and submitted to the undersigned, Audit Committee of Alchip Technologies, Limited 2020 Business Report, Consolidated Financial Statements and Dividend Distribution proposal. The Consolidated Financial Statements have been duly audited by Certified Public Accountants Yi-Wen Wang and Shih-Tsung Wu of Deloitte & Touche. The above Business Report, Consolidated Financial Statements and Dividend Distribution proposal have been examined and determined to be correct and accurate by the undersigned. This Report is duly submitted in accordance with Article 14-4 of Securities and Exchange Law and Article 219 of the Company Law.

The Audit Committee, Chairman:

Mr. Mao-Wei Hung



**6.6 Consolidated Financial Statement for the most recent year, including an auditor's report prepared by a CPA, and 2-year comparative balance sheet, statement of comprehensive income, statement of changes in equity, cash flow chart, and any related footnotes or attached appendices**

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Please refer to pages 137 to 196.

**6.7 A Parent Company Only Financial Statement for the Most Recent Year, Certified by a CPA, but not Including the Statements of Major Accounting Items**

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Not applicable.

**6.8 Financial Difficulties Encountered By the Company and the Related Party in the Most Recent Year and Up to the Date of the Annual Report**

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None.

## VII. Financial Status, Operating Results, and Risk Management

### 7.1 Financial Status

Unit: NT\$ thousand

Item	2019	2020	Difference	
			Amount	%
Current Assets	4,108,247	7,693,440	3,585,193	87.27
Property, Plant and Equipment	389,422	814,549	425,127	109.17
Intangible Assets	221,553	123,696	(97,857)	(44.17)
Other Non-Current Assets	14,987	15,968	981	6.55
<b>Total Assets</b>	<b>5,225,066</b>	<b>9,112,980</b>	<b>3,887,914</b>	<b>74.41</b>
Current Liabilities	1,815,666	5,131,391	3,315,725	182.62
Non-Current Liabilities	107,655	93,347	(14,308)	(13.29)
Other Liabilities	-	-	-	-
<b>Total Liabilities</b>	<b>1,923,321</b>	<b>5,224,738</b>	<b>3,301,417</b>	<b>171.65</b>
Share Capital	606,129	620,285	14,156	2.34
Capital Surplus	1,534,620	1,684,359	149,739	9.76
Retained Earnings	1,164,749	1,785,555	620,806	53.30
Other Equity	(3,753)	(201,957)	198,204	5,281.22
<b>Total Equity</b>	<b>3,301,745</b>	<b>3,888,242</b>	<b>586,497</b>	<b>17.76</b>
<p>1. Analysis for changes that exceed 20% and reached NT\$10 millionn in past the two years:</p> <p>(1) Current Assets : Mainly due to increase in cash and cash equivalents in 2020.</p> <p>(2) Property, plant and equipment : Mainly due to increase in purchase of machinery equipment in 2020.</p> <p>(3) Intangible Assets : Mainly due to decrease in purchase of intellectual property in 2020.</p> <p>(4) Current liabilities : Mainly due to increase in receive in advance from customer in 2020.</p> <p>(5) Retained Earnings : Mainly due to increase in net profit in 2020.</p> <p>(6) Other Equity : Mainly due to changes of Exchange differences arising on translation to the presentation currency.</p> <p>2. The changes had no major impact on Alchip's financial position.</p>				

## 7.2 Operating Results

Unit: NT\$ thousand

Item	2019	2020	Difference	
			Amount	%
Operating revenues	4,331,956	7,078,919	2,746,963	63.41
Operating costs	2,720,914	4,771,652	2,050,738	75.37
Gross profit	1,611,042	2,307,267	696,225	43.22
Operating expenses	1,178,164	1,320,124	141,960	12.05
Profit from operations	432,878	987,143	554,265	128.04
Non-operating income and expenses	92,405	98,647	6,242	6.76
Profit before income tax	525,283	1,085,790	560,507	106.71
Income tax expense	91,771	250,873	159,102	173.37
Net profit	433,512	834,917	401,405	92.59
Other comprehensive income(loss)	(48,639)	(198,204)	149,565	307.50
Total comprehensive income(loss) for the year	384,873	636,713	251,840	65.43

1. Analysis for changes that exceed 20% and reached NT\$10 million in the past two years:

- (1) Operating revenue : Mainly due to increase in the revenue of chip production in 2020.
- (2) Operating costs : Mainly due to increase in chip production business as well as increase in production cost in 2020.
- (3) Gross profit, Profit (loss) from operations : Mainly due to the increase in operating revenues in 2020.
- (4) Income tax expense : Mainly due to increase in profit before income tax in 2020.
- (5) Profit before income tax, Net profit) : Mainly due to increase in operating revenues in 2020.
- (6) Other comprehensive income(loss) : Mainly due to exchange differences arising on translation to the presentation currency.
- (7) Total comprehensive income(loss) for the year : Mainly due to aforementioned changes.

2. The changes had no major impact on Alchip's financial position.

## 7.3 Analysis of Cash Flow

### 7.3.1 Cash flow analysis

Unit: NT\$ thousand

Item \ Year	2019	2020	Increase/Decrease	
			Amount	%
Operating activities	1,664,379	4,554,090	2,889,711	173.62
Investing activities	(294,549)	(1,952,563)	1,658,014	562.90
Financing activities	(76,446)	(187,605)	111,159	145.41

Analysis of changes:

- (1) Operating activities : A increase in cash generated from operating activities is mainly due to increase in net profit and receive in advance from customers in 2020.
- (2) Investing activities : A increase in cash used in investing activities is mainly due to increase in purchase of machinery and time deposit in 2020.
- (3) Financing activities : A increase in cash used in financing activities is mainly due to increase in distribution of cash dividend in 2020.

### 7.3.2 Improvement plans for Cash Shortfall

The Company has ample cash on-hand , improvement plans are not required.

## 7.4 Major Capital Expenditure and its Effect on Finance and Business operations of the Company

None.

## 7.5 Investment Policies, Main Reasons for Profits or Losses, Improvement Plans and Investment Plans for the Coming Year

Unit:NT\$thousand

Item	Investment Profit (Loss) in 2020	Investment Policy	Reasons for the Profits/Losses	Improvement Plan	Investment plan for the coming year
Alchip (HK)	61,761	Invest in subsidiaries in China	Investment profit from equity method investment	Not applicable	None
Alchip (US)	(2,946)	An office to develop U.S. market	Maintained a stable operating status	Not applicable	None
Alchip (JP)	4,719	An office to develop Japan market	Maintained a stable operating status	Not applicable	None

Alchip (TW)	(48,389)	Provide ASIC and SoC services	Maintained a stable operating status	Not applicable	None
Alchip BVI	3,261	General investment	Investment profit from bond investment	Not applicable	None
Alchip (SH)	33,164	An office to develop the China market, and provide sales and R&D support	Maintained a stable operating status	Not applicable	None
Alchip Wuxi)	4,374	Provide R&D support	Maintained a stable operating status	Not applicable	None
Alchip (Hefei)	19,025	Provide R&D support	Maintained a stable operating status	Not applicable	None
Alchip (Jinan)	11,490	Provide R&D support	Maintained a stable operating status	Not applicable	None
Alchip(Guangzhou)	(5,877)	Provide R&D support	Maintained a stable operating status	Not applicable	None

## 7.6 Risk Management

### 7.6.1 Risks associated with interest rate fluctuation, foreign exchange volatility and inflation

#### A. Interest rate

The Company's interest expenses was NT\$3,954 thousand in 2020, accounted for 0.06% of annual operating income. Therefore, interest rate fluctuation in future have no material impact on the Company's operation and profit.

#### B. Foreign exchange rate

The Group has the U.S. Dollar and Japanese Yen as its functional currency, as the Group's sales and purchases were mainly settled in U.S. Dollar. It also holds other currencies to meet subsidiaries' working capital requirements. The Company's foreign exchange losses were NT\$1,259 thousand in 2020 and the foreign exchange gains were NT\$2,479 thousand in 2019, accounted for 0.02% and 0.06% of annual operating income, respectively, which have little impact on the Company's operations and profits.

The Group currently has no material risk of exchange rate fluctuations. However, it is anticipated that Cayman Holdings Company applying for listing on the Taiwan Stock Exchange may probably pay NTD dividends to domestic investors, or acquire NTD funding from domestic fundraising that will be required to convert it to USD for use in the future, the risk of changes in USD to NTD exchange rates in which may be incurred. Response measures will be possibly adopted by the financial department of the Company as follows:



- (1) Financial personnel maintain appropriate foreign exchange positions at the right time based on future foreign exchange rate trends required for operations of the Group's subsidiaries, and reduce the impact of exchange rate fluctuation on the listing company's profit ability.
- (2) Keep close contact with main banks and monitor changes in the foreign exchange market to provide relevant heads of divisions and branches with a full grasp of the trend in exchange rate fluctuation to make timely adjustments in response to contingent circumstances of change in the currency of collection and payment.
- (3) Adopt the natural write-off principle (namely, the whole overseas and domestic sales are quoted in Dollars) to external currency risks, and apply methods such as forward exchange agreements and taking foreign currency debts at the right as needed to reduce the impact of exchange rate fluctuation on the company's profit or loss.

### **C. Inflation/deflation**

Prices of raw materials required by the Company remain stable. The Company's future profit or loss is not much affected by the short-term inflation.

### **7.6.2 Risks associated with high-risk, high-leveraged investments, lending, endorsements, and guarantees for other parties, and financial derivatives transactions**

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The Company's conservative financial management, and does not engaged in investmetns that are either high-risk or high-leveraged and derivatives transactionsr. Any lending or endorsement guarantees will be conducted in accordance with relevant requirements prescribed in the Company's "Guideline for Acquisition and Disposal of Assets", "The Guideline for Loaning Funds to Others", and "The Guideline For Endorsement and Guaranty". No loss has occurred by now.

### **7.6.3 Future research & development plans and expected spending**

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In response to future growth, the Company will continuously invest R&D resources in development of high-end System on Chip (SoC) for advanced processes (16, 12 and 7nm) and R&D in design for customized circuit Silicon Intellectual Property (IP). Major R&D items include: Low Power Design Flow, Clocking Optimization technique, Signal Integrity management technology, design and development of customized circuit Silicon Intellectual Property, such as design and development of high-speed Mobile Industry Processor Interface (MIPI) circuit, performance enhancement of high-end microprocessor and peripheral Silicon Intellectual Property, high-end multi-chip packaging design technology, and so on.

In 2020 and 2019, the Company invested NT\$784,117 thousand and NT\$685,741 thousand in R&D, respectively, both reached hundred million NT dollars. It will continue to invest R&D resources in the future depending on the product development plan. However, if the Company does not continue to invest R&D in the future, products development and relevant R&D plans will be limited. Moreoverthe Company may be unable to meet customer needs or market trends and then even will loss orders. As a result, it will have a material adverse effect on the company's operations.

### **7.6.4 Risk associated with changes in foreign and domestic policy and regulatory**

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The country of registration place of the Company is Cayman Island whose principal economic activity is financial services with open economy, no foreign exchange controls, and stable political and economic environment. The major places of operation of the Company are Taiwan and China with businesses performed in accordance with relevant laws and regulations of competent authorities at major places of operation.

### **7.6.5 New technology and industry changes impact on the Company's finance and business operations**

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The Company has always emphasized the improvement of R&D capabilities. Currently the chips designed and produced by it are mostly products in 16nm and below processes. No material adverse effect of technological and industry changes on the company's finance and business operations in medium- and long-term is expected. The Company reviews and recognizes IT security risk topic every year, based on the severity and the possibility of risk occurs to assess the risks. If the result of risk assessment is "High Risk", the corresponding of risk control will be performed. There is no High Risk of IT security risk at this current assessment.

### **7.6.6 The impact of changes in corporate image on company's crisis management**

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None.

### **7.6.7 Expected benefits and risks associated with mergers and acquisitions**

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Not applicable.

### **7.6.8 Expected benefits and risks associated with facility expansion**

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Not applicable.

### **7.6.9 Risks associated with purchase concentration and sales concentration**

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#### **A. Concentration of purchasing**

The Company's main raw material is wafer, and mainly purchased from Taiwan Semiconductor Manufacturing Company Limited (hereinafter referred to as "TSMC"). There has indeed been a concentration phenomenon in purchasing operations. Since the Company does not sign a long-term supply contract with the wafer foundry, once the wafer foundry does not give adequate support capacity, risks of shortage or interruptions may occur in the Company. However, the Company develops relationships of strategic alliance and business bond with suppliers for wafer capacity, and provides timely the latest application trends in products on the market and estimated sales of products in order for wafer foundries to support the capacity requirements. Meanwhile, it obtains TSMC's capacity plan for more than half a year to meet the demand for material preparation of production. In addition, the Company has built the second source of supply to increase the flexibility of source of supply and avoid any circumstance such as shortage or interruptions of supply.

#### **B. Concentration of Sales**

The top sales customer of the Company was the customer of S Company, with proportion of 39.43%. The Company constantly endeavored to develop new customers and diversify customer base in the past year. The benefit thereof will be revealed in 2021.

### **7.6.10 Impact and risk associated with large share transfers or changes in shareholdings of Directors, or shareholders who hold more than 10% of the Company's shares, and countermeasures**

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One of the Company's shareholders, Morgan Stanley Co. International PLC held more than 10% of the Company's shares on June 30, 2020 and then held less than 10% of the Company's shares on July 10, 2020. There is no significant impact and risk on share transfers or changes in shareholdings of directors, supervisors, or shareholders who hold more than 10% of the Company's shares up to the date of publication of the annual report.

### **7.6.11 Impact and risk associated with changes in management rights, and countermeasures**

No such case during the most recent year and the current year up to the date of publication of the annual report.

### **7.6.12 Litigation or non-litigation matters**

If the outcome of a concluded or pending litigious, non-litigious or administrative litigation event involving the company, director, general manager, de facto responsible person major shareholders holding more than 10% equity interest, or subsidiary of the company might have material impact on shareholders' equity or the prices of the company's securities, disclose the facts of dispute, amount of claim, lawsuit start date, main parties concerned and current status as of the date of the publication of annual report.

- A. For litigious or non-litigious proceedings or administrative disputes involving the company with respect to which a judgment has become final and unappealable in the most recent two years or in the current year up to the date of the publication of the annual report, and for any such matter still pending. If the outcome could materially impact shareholders' equity or the prices of the company's securities, the annual report shall list the facts of the dispute, amount of money at stake in the dispute, the date of commencement of proceedings, the main parties to the dispute, and current status of the dispute's handling:** None.
- B. For litigious or non-litigious proceedings or administrative disputes involving a company director, the general manager, a de facto responsible person, a 10 percent or greater major shareholder, or a controlled company, if a judgment has become final and unappealable in the most recent two years and the current year up to the date of the publication of the annual report, or if such a matter is still pending, if the outcome could materially impact shareholders' equity or the prices of the company's securities, the annual report shall list the facts of the dispute, amount of money at stake in the dispute, the date of commencement of proceedings, the main parties to the dispute, and current status of the dispute's handling:** None.
- C. Where any of the situations set out under Article 157 of the Securities and Exchange Act has occurred with respect to a company director, managerial officer, or 10 percent or greater major shareholder within the preceding two years, or in the current year up to the date of publication of the annual report, the prospectus shall indicate that fact and describe the current status of the company's handling of the matter:** One of the Company's shareholders, Morgan Stanley Co. International PLC already disgorged the realized profit and its interests on July 22, 2020. The payment had been received and confirmed by the Company.

### **7.6.13 Other Material Risks**

None.

### **7.7 Other Material Matters**

None.

## VIII. Special Disclosure

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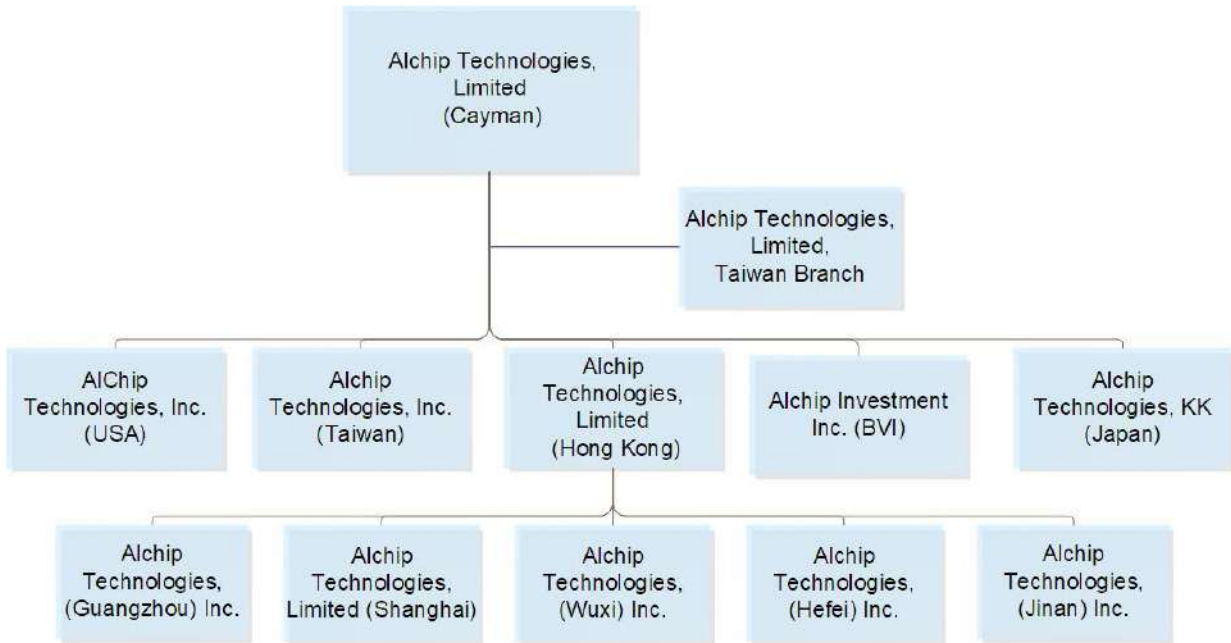
### 8.1 Information related to the company's affiliated companies

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#### 8.1.1 Consolidated Business Reports

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##### 8.1.1.1 Affiliated companies chart



### 8.1.1.2 Affiliated Companies

December 31, 2020;Unit: thousand

Company Name	Major Businesses	Date of Incorporation	Place of Registration	Capital Stock
Alchip HongKong	General investment	2002	Hong Kong	US\$17,029 (Note2)
Alchip US	Sales	2003	USA	US\$3,910
Alchip Japan	Sales and R&D	2004	Japan	YEN100,000
Alchip Taiwan	ASIC and SoC services	2005	Taiwan	NT\$100
Alchip BVI	General investment	2015	BVI	US\$15,100 (Note1)
Alchip Shanghai	R&D, ASIC and SoC service and sales	2002	Mainland China	US\$12,800
Alchip Wuxi	R&D, ASIC and SoC service	2012	Mainland China	US\$2,000
Alchip Hefei	R&D, ASIC and SoC service	2016	Mainland China	US\$500
Alchip Jinan	R&D, ASIC and SoC service	2018	Mainland China	US\$784
Alchip Guangzhou	R&D, ASIC and SoC service	2020	Mainland China	US\$500

Note1 : The amount of US\$15,050 thousand has been remitted.However, the procedure of capital-increase has not been completed.

Note2 : The amount of US\$1,320 thousand has been remitted.However, the procedure of capital-increase has not been completed.

### 8.1.1.3 For companies presumed to have a relationship of control and subordination and information on their shareholders in common: None.

**8.1.1.4 Business Scope of the Company and its Affiliated Companies:** The Company and its affiliates all engage in professional Application Specific IC (ASIC) and System-on-Chip (SoC) design, manufacturing and production.

**8.1.1.5 List of Directors, Supervisors, and Presidents of Company's Affiliated Companies:**

December 31, 2020

Company Name	Title	Representative	Number of Shares	% of holding
Alchip HongKong	Chairman	Kinying Kwan	Alchip Technologies (Cayman) holds 12,230,170 thousand shares	100%
	Director	Kinying Kwan		
Alchip US	Director	Kinying Kwan	Alchip Technologies (Cayman) holds 391,000 thousand shares	100%
	GM	Hiroyuki Nagashima		
Alchip Japan	Chairman	Junichiro Hosaka	Alchip Technologies (Cayman) holds 1 thousand shares	100%
	GM	Junichiro Hosaka		
	Director	Junichiro Hosaka		
	Director	Kozo Fujita		
	Director Supervisor	Kinying Kwan Hiroyuki Furuzono		
Alchip Taiwan	Chairman	Kinying Kwan	Alchip Technologies (Cayman) holds 10 thousand shares	100%
	CEO	Johnny Shyang-Lin Shen		
	Director	Kinying Kwan		
Alchip BVI	Director	Daniel Wang	Alchip Technologies (Cayman) holds 50 thousand shares	100%
	Director	Nancy Chan		
Alchip Shanghai	Chairman	Andy Lin	Alchip Technologies (Cayman) holds 100% shareholder rights through Alchip HongKong	100%
	GM	Andy Lin		
Alchip Wuxi	Chairman	Andy Lin	Alchip Technologies (Cayman) holds 100% shareholder rights through Alchip HongKong	100%
	GM	Andy Lin		
	Director	Daniel Wang		
	Director	Leo Cheng		
	Supervisor	Johnny Shyang- Lin Shen		
Alchip Hefei	Chairman	Andy Lin	Alchip Technologies (Cayman) holds 100% shareholder rights through Alchip HongKong	100%
	GM	Andy Lin		
	Director	Daniel Wang		
	Director	Leo Cheng		
	Supervisor	Johnny Shyang- Lin Shen		
Alchip Jinan	Chairman	Andy Lin	Alchip Technologies (Cayman) holds 100% shareholder rights through Alchip HongKong	100%
	GM	Andy Lin		
	Director	Daniel Wang		
	Director	Leo Cheng		
	Supervisor	Johnny Shyang- Lin Shen		
Alchip Guangzhou	Chairman	Andy Lin	Alchip Technologies (Cayman) holds 100% shareholder rights through Alchip HongKong	100%
	GM	Andy Lin		
	Director	Daniel Wang		
	Director	Leo Cheng		
	Supervisor	Johnny Shyang- Lin Shen		

### 8.1.1.6 Operation Highlights of Company's Affiliated Companies

December 31, 2020;Unit:NT\$thousand

Company	Assets	Liabilities	Net Worth	Revenue	Operating Profit(Loss)	Net Profit(Loss)	EPS (NT\$)
Alchip Hong Kong	670,456	148	670,308	-	(415)	61,761	-
Alchip US	29,330	12,423	16,907	25,185	(2,875)	(2,946)	-
Alchip Japan	281,091	211,736	69,355	707,359	14,015	4,719.00	-
Alchip Taiwan	546,000	29,024	516,976	-	(50,984)	(48,389)	-
Alchip BVI	497,036	50	496,986	-	(83)	3,261	-
Alchip Shanghai	594,064	172,374	421,690	588,897	38,442	33,164	-
Alchip Wuxi	177,784	54,847	122,937	149,320	(15,652)	4,374	-
Alchip Hefei	97,828	33,707	64,121	139,638	(17,442)	19,025	-
Alchip Jinan	78,501	29,005	49,496	59,001	(3,841)	11,490	-
Alchip Guangzhou	16,131	7,086	9,045	850	(7,277)	(5,877)	-

### 8.1.2 Consolidated financial statements of subsidiaries

It is same as the consolidated financial statements of the Company. Please refer to page 137~196.

### 8.1.3 Reports on Subsidiaries

Not applicable.

### 8.2 Private Placement Securities

None.

### 8.3 Holding or Disposal of Company's Stock by Subsidiaries

None.

### 8.4 Other Necessary Supplements

None.

## 8.5 Major Difference Between The Company's Articles of Association and the Regulations on the Protection of Shareholders' Equity of Taiwan

Matters of material significance on the protection of shareholders' rights and interests	Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"	Regulations relating to the laws of the foreign issuer's country of registration place	Provisions in the Company's Articles of Association and reasons for the discrepancy
<p><b>I. Formation and change of equity capital of a company</b></p> <p>1. A company shall not cancel its shares, unless a resolution on capital reduction has been adopted by its shareholders' meeting; and capital reduction shall be effected based on the percentage of shareholding of the shareholders pro rata.</p> <p>2. A company reducing its capital may return share prices (or the capital stock) to shareholders by properties other than cash; the returned property and the amount of such substitutive capital contribution shall require a prior approval of the shareholders' meeting and obtain consents from the shareholders who receive such property.</p> <p>3. The Board of Directors shall first have the value of such property and the amount of such substitutive capital contribution set forth in the preceding Paragraph audited and certified by a Certified Public Accountant of the Republic of China before the shareholders' meeting.</p>	<p>Article 168 of the Company Act</p>	<p>1. The Company may, pursuant to Article 14 of the Company Law of Cayman Islands, reduce its capital previously issued only after a Special Resolution adopted by the shareholders' meeting and confirmed by the court of the Cayman Islands.</p> <p>2. Except as required by Article 14 of the Company Law of Cayman Islands, the Company's capital previously issued can be cancelled only when they are purchased, returned, or redeemed by the Company in accordance with Article 37 or Article 37B of the Company Law of Cayman Islands.</p> <p>3. Subject to Article 37 of the Company Law of Cayman Islands, the Company may purchase its own shares on such terms and in such manners as prescribed in the company's Articles of Association or resolved by the shareholders' meeting. Except as required by Article 37 of the Company Law of Cayman Islands, the following are not prescribed in the Company Law of Cayman Islands: (1) repurchase shall be effected based on the</p>	<p>There's a slight difference in the Article 10.7 of the company's Articles of Association and the matters of material significance on the protection of shareholders' rights and interests as stated left. Under the Company Law of Cayman Islands, the Company may reduce shares previously issued only after a Special Resolution adopted by the shareholders' meeting and confirmed by the court of the Cayman Islands. In view of this, as the procedure prescribed in Article 14.1 and Article 10.7 of the company's Articles of Association, the Company may reduce its capital through the purchase of shares. Reasons for such difference are due to the requirements in the Company Law of Cayman Islands. However, the company's Articles of Association does not set limits on the procedure for capital reduction. Therefore, such differences should not have a material adverse effect on the Company's shareholders' rights and interests.</p>



Matters of material significance on the protection of shareholders' rights and interests	Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"	Regulations relating to the laws of the foreign issuer's country of registration place	Provisions in the Company's Articles of Association and reasons for the discrepancy
<p>1. Procedures for the Company to enter into a stock option agreement with its employees or issue employee stock options.</p> <p>2. The stock option obtained by any employee of the issuing company shall be non-assignment, except to the heir(s) of the said employee.</p>	<p>Article 167-2 of the Company Act</p>	<p>percentage of shareholding of the shareholders pro rata, (2) return share prices (or the capital stock) to shareholders by properties other than cash shall require a prior approval, or (3) shall have the value of property returned assessed; however, it may be prescribed in the company's Articles of Association.</p> <p>There is no particular regulation in the Company Law of Cayman Islands for employee stock option agreement or procedures of employee stock options issuance. Issuance of employee stock options and whether the options can be assigned should be prescribed in the employees' stock option agreement or stock option plan.</p>	<p>Although there have been amendments to Articles 11.1 to 11.4 of the company's Articles of Association based on the matters of material significance on the protection of shareholders' rights and interests as stated left, any restriction on assignment of employee stock options should be prescribed in the employees' stock option agreement or stock option plan in accordance with the Company Law of Cayman Islands. Such difference should not have a material adverse effect on the Company's shareholders' rights and interests.</p>
<p><b>II. Procedure for convening a shareholders' meeting or the method of resolutions</b></p>			
<p>1. A regular meeting of shareholders shall be held at least once every year and convened within six months after close of each fiscal year. A shareholders meeting shall be convened by the Board of Directors.</p> <p>2. A shareholders' meeting shall be convened within the territory of the Republic of China. Where a shareholders' meeting is to be</p>	<p>1. Article 170 of the Company Act 2. Article 172-1 of the Company Act 3. Paragraph 1 &amp; 2, Article 173 of the Company Act 4. Article 172 of the Company Act, Article 26-1 &amp; 43-6 of the Securities and Exchange Act 5. Article 173-1 of the Company Act</p>	<p>1. (a) Except for an exempted company, the shareholders' meeting shall be held by each company at least once every year as set forth in Article 58 of the Company Law of Cayman Islands. (b) An exempted company is not mandatorily required to convene the regular meeting of shareholders</p>	<p>For a foreign issuer being an exempted company under the Company Law of Cayman Islands, there is no need to hold an annual shareholders' meeting every year in accordance with the Company Law of the Cayman Islands provided that "The Company shall hold a general meeting as its annual general meeting within six months following the end of each fiscal year, and shall specify the</p>

<p><b>Matters of material significance on the protection of shareholders' rights and interests</b></p>	<p><b>Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"</b></p>	<p><b>Regulations relating to the laws of the foreign issuer's country of registration place</b></p>	<p><b>Provisions in the Company's Articles of Association and reasons for the discrepancy</b></p>
<p>convened outside the territory of the Republic of China, the Company shall apply for the approval of TWSE within two days after the Board resolution or obtaining the approval of the competent authority to convene the meeting by the shareholder(s).</p> <p>3. Shareholders holding 1% or more of the total issued shares may present to the foreign issuer a proposal at a shareholders' meeting in writing or electronically. The foreign issuer shall accept such proposals submitted by shareholders unless (i) the proposal involves matters which cannot be resolved at a shareholders' meeting (ii) the number of shares held by the shareholder is less than 1% of the total issued shares, (iii) the proposal was submitted not within the announced accepted period of time, or (iv) the proposal exceed 300 words or includes more than one proposal. For proposal urging the foreign issuer to promote public interests or fulfil its social responsibility, the board shall accept such proposal.</p> <p>4. Any or a plural number of shareholder(s) of a company who has (have) continuously held 3% or more of the total number of outstanding shares for a period of</p>		<p>by the Company Law of Cayman Islands. The Company may include the number of shareholders' meetings required to be convened by the company every year in its Articles of Association.</p> <p>2. The shareholders' meeting of an exempted company is not restricted to be convened at a specific place by the Company Law of Cayman Islands; however, it may be prescribed in the company's Articles of Association.</p> <p>3. The shareholders' meeting convened by shareholder(s) or shareholders' proposal right is not required by the Company Law of Cayman Islands; however, the relevant procedures may be prescribed in the Articles of Association.</p> <p>4. The contents of the shareholders' meeting notice is not required by the Company Law of Cayman Islands; however, it may be prescribed in the Company's Articles of Association.</p> <p>5. The detail of the convention of shareholders' meetings is not required by the Company Law of Cayman Islands; however, the relevant procedures may be prescribed in the Articles of Association.</p>	<p>meeting as such in the notices calling it. At these meetings, the report of the Directors (if any) shall be presented." as prescribed in Article 16.2 of the Company's Articles of Association.</p> <p>Other matters are prescribed respectively in Articles 16.2, 16.3, 16.4, 18.9, 16.5 to 16.8, and 17.5 of the company's Articles of Association.</p> <p>Per Letter Tai-Zheng-Shang-Zi No. 0991701319 filed on April 13, 2010 by the TWSE, "Explanation 2 (3): To the extent that the laws of the place of registration are not contradicted, a foreign issuer may remove the part of "obtaining an approval from the competent authority" from the clause on the right of minority shareholders to call a special shareholders' meeting in the articles of association." Therefore, subject to Article 16.8 of the company's Articles of Association, "If the board of Directors do not within fifteen days from the date of the deposit of the requisition dispatch the notice of an extraordinary general meeting, the requisitionists may themselves convene an extraordinary general meeting in accordance with the Applicable Public Company Rules." Such difference should not have a material adverse effect on the</p>

<p><b>Matters of material significance on the protection of shareholders' rights and interests</b></p>	<p><b>Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"</b></p>	<p><b>Regulations relating to the laws of the foreign issuer's country of registration place</b></p>	<p><b>Provisions in the Company's Articles of Association and reasons for the discrepancy</b></p>
<p>one year or a longer time may, by filing a written proposal setting forth therein the subjects for discussion and the reasons, request the Board of Directors to call a special meeting of shareholders. If the Board of Directors fails to give a notice for convening a special meeting of shareholders within 15 days after the filing of the request, the proposing shareholder(s) may, after obtaining an approval from the competent authority, convene a special meeting of shareholders on his/their own.</p> <p>5. Shareholders continuously holding no less than 50% of the total issued shares for three months or longer are eligible to convene a special general meeting. The calculation of the holding period and holding number of shares shall be based on the holding at the time of share transfer suspension date.</p> <p>6. The following matters shall not shall be itemized in the causes or subjects to be described in the notice to convene a meeting of shareholders and explained about the important contents thereof, and shall not be brought up as extemporary motions; the main content can be announced at the website designated by Taiwan securities authority or by the foreign issuer, and the foreign issuer shall</p>			<p>Company's shareholders' rights and interests.</p>

Matters of material significance on the protection of shareholders' rights and interests	Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"	Regulations relating to the laws of the foreign issuer's country of registration place	Provisions in the Company's Articles of Association and reasons for the discrepancy
<p>specify the link to the website on the notice</p> <ol style="list-style-type: none"> <li>(1) Election or discharge of Directors and supervisors;</li> <li>(2) Alteration of the Articles of Association;</li> <li>(3) Capital reduction;</li> <li>(4) Application to terminate public offering;</li> <li>(5) Dissolution, merger, conversion of shares, spin-off of the company;</li> <li>(6) Enter into, amend, or terminate any contract for lease of the company's business in whole, or for entrusted business, or for regular joint operation with others;</li> <li>(7) Transfer the whole or any essential part of its business or assets;</li> <li>(8) Accept the transfer of another's whole business or assets, which has great bearing on the business operation of the company;</li> <li>(9) Private placement of any equity-type securities;</li> <li>(10) Granting waiver to the Director's engaging in any business within the scope of business of the Company;</li> <li>(11) Distributing part or all of its dividends or bonus by way of issuance of new Shares; and</li> <li>(12) Distribution of legal reserve fund from profit and capital reserve</li> </ol>			

Matters of material significance on the protection of shareholders' rights and interests	Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"	Regulations relating to the laws of the foreign issuer's country of registration place	Provisions in the Company's Articles of Association and reasons for the discrepancy
<p>from share premium or gift, by means of rights issue or cash payment to existing shareholders.</p> <p>1. The voting power at a shareholders' meeting may be exercised in writing or by way of electronic transmission. Where the company meeting the "Range of Companies Subject to Electronic Voting Requirement" promulgated by the securities authority of the Republic of China; however, shall adopt the electronic transmission as one of the methods for exercising the voting power.</p> <p>2. Where a shareholders' meeting is to be convened outside the territory of the Republic of China, the Company must allow the shareholders to exercise the votes and cast the votes in writing or by way of electronic transmission</p> <p>3. The method for exercising the voting power shall be described in the shareholders' meeting notice to be given to the shareholders if the voting power will be exercised in writing or by way of electronic transmission by the company. A shareholder who exercises his/her/its voting power at a shareholders meeting in writing or by way of electronic transmission shall be deemed to have attended the</p>	<p>1. Article 177-1 of the Company Act</p> <p>2. Article 177-2 of the Company Act</p>	<p>1. A shareholder shall not exercise his/her/its voting power in writing or by way of electronic transmission. Unless otherwise provided by the company's Articles of Association; however, a shareholder may authorize a proxy in writing or by way of electronic transmission to exercise the voting rights of his/her/its shares at the meeting.</p> <p>2. In case a shareholder exercises the voting power in his/her/its behalf through a proxy, he/she/it will not be deemed to have attended the shareholders' meeting in person.</p> <p>3. The Company's Articles of Association may prescribe the delivery of the power of attorney.</p> <p>4. There is no stipulation that a shareholder revokes the power of attorney in the Company Law of Cayman Islands. However, under principles of common law, notwithstanding anything in the Company's Articles of Association to the contrary, shareholders who attend the shareholders' meeting in person to exercise their voting power shall have the preemptive effect, provided that the Company's Articles of Association may prescribe the</p>	<p>As prescribed in Article 19.6 of the company's Articles of Association, "A Member exercising voting power by way of a written ballot or by way of an electronic transmission shall be deemed to have appointed the chairman of the general meeting as his proxy to exercise his or her voting right at such general meeting in accordance with the instructions stipulated in the written or electronic document." Although the Company Law of Cayman Islands considers a shareholder exercising the voting power in such manner not to be deemed to have attended the shareholders' meeting in person, such a shareholder is still entitled to all the rights of a shareholder who has exercised his/her/its voting power in writing or by way of electronic transmission in accordance with the applicable laws and regulations of the Republic of China. Such difference should not have a material adverse effect on the Company's shareholders' rights and interests.</p>

Matters of material significance on the protection of shareholders' rights and interests	Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"	Regulations relating to the laws of the foreign issuer's country of registration place	Provisions in the Company's Articles of Association and reasons for the discrepancy
<p>said shareholders' meeting in person, but shall be deemed to have waived his/her/its voting power in respective of any extemporary motion(s) and/or the amendment(s) to the contents of the original proposal(s) at the said shareholders' meeting.</p> <p>4. In case a shareholder elects to exercise his/her/its voting power in writing or by way of electronic transmission, his/her/its declaration of intention shall be served to the company two (2) days prior to the scheduled meeting date of the shareholders' meeting, whereas if two (2) or more declarations of the same intention are served to the company, the first declaration of such intention received shall prevail; unless an explicit statement to revoke the previous declaration is made in the declaration which comes later.</p> <p>5. In case a shareholder who has exercised his/her/its voting power in writing or by way of electronic transmission intends to attend the shareholders' meeting in person, he/she/it shall, two days prior to the meeting date of the scheduled shareholders' meeting and in the same manner previously used in exercising his/her/its voting power,</p>		<p>revocation of the power of attorney when shareholders do not attend the shareholders' meeting in person.</p>	

Matters of material significance on the protection of shareholders' rights and interests	Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"	Regulations relating to the laws of the foreign issuer's country of registration place	Provisions in the Company's Articles of Association and reasons for the discrepancy
<p>serve a separate declaration of intention to rescind his/her/its previous declaration of intention made in exercising the voting power under the preceding paragraph. In the absence of a timely rescission of the previous declaration of intention, the voting power exercised in writing or by way of electronic transmission shall prevail.</p> <p>6. In case a shareholder has exercised his/her/its voting power in writing or by way of electronic transmission, and has also authorized a proxy to attend the shareholders' meeting in his/her/its behalf, then the voting power exercised by the authorized proxy for the said shareholder shall prevail.</p>			
<p>1. If any of the following proposal is adopted via the resolution of the shareholders' meeting, the dissenting Member shall execute the right of the redemption against the Company:</p> <p>(1). Any Spin-off, Merger, acquisition or Share Swap;</p> <p>(2). Enter into, amend, or terminate any contract for lease of the Company's business in whole, or for entrusted business, or for regular joint operation with others; Transfer the whole or any essential</p>	<p>1. Article § 186 and 317 of Company Act of Taiwan</p> <p>2. Article § 12 of Business Mergers And Acquisitions Act of Taiwan</p>	<p>According to Article § 238 of Companies Law of Cayman Islands, it sets forth the regulation with respect to the rights of dissenting Member, who execute the right of redemption against the Company.</p>	<p>There's a slight difference in the Article 22.3 of the Company's Articles of Association and the matters of material significance on the protection of shareholders' rights and interests as stated left. Under the Article § 238 of Companies Law of Cayman Islands, it has set forth the relevant regulations with respect to the rights of dissenting Member. The Article 22.2 and 22.3 of the Company's Articles of Association are amended in compliance with the protection of shareholders' rights and interests as stated left. In addition, the</p>

<p><b>Matters of material significance on the protection of shareholders' rights and interests</b></p> <p>part of its business or assets; or Accept the transfer of another's whole business or assets, which has great bearing on the business operation of the company.</p> <p>2. The requesting Member, in the prior Section, shall provide the written notice to the Company within twenty days after the adoption of resolution made by Shareholders' meeting, stating therein the appraisal price of shares. In the event the requesting Member and the Company have reached an agreement in regard to the appraisal price of the Shares held by such requesting Member, the Company shall pay such price within ninety days after the date on which the resolution was adopted. In the event the requesting Member and the Company fail to reach any agreement with respect to the appraisal price, the Company shall pay the price to which the Company considers to be fair price, to the requesting Member within ninety days after the date of the relevant resolution. If the Company fails to pay the price to which the Company considers to be the fair price within ninety days after the date in which the resolution was adopted, the Company shall be deemed to have</p>	<p><b>Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"</b></p>	<p><b>Regulations relating to the laws of the foreign issuer's country of registration place</b></p>	<p><b>Provisions in the Company's Articles of Association and reasons for the discrepancy</b></p> <p>Article 22.3 of the Company's Articles of Association is also amended to specify that dissenting Member will reserve the right under the Article § 238 of Companies Law of Cayman Islands. Reasons for such difference are due to the requirements in the Company Law of Cayman Islands. Therefore, such differences should not have a material adverse effect on the Company's shareholders' rights and interests.</p>
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Matters of material significance on the protection of shareholders' rights and interests	Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"	Regulations relating to the laws of the foreign issuer's country of registration place	Provisions in the Company's Articles of Association and reasons for the discrepancy
<p>agreed to the appraisal price requested by the dissenting Member.</p> <p>3. In the event the Company and the requesting Member, who executes the right under the Paragraph I of Section I, fail to reach the agreement with respect to the appraisal price within sixty days after the resolution date, the Company shall, within thirty days after such sixty-day period, file a petition to Taipei District Court or a ruling on the appraisal price against all the requesting Members as the opposing party.</p>			
<p>Any of the following proposals involving material rights or interests of shareholders shall not be adopted without a resolution adopted by a majority of the shareholders present who represent two-thirds or more of the total number of its outstanding shares. If the total number of shares represented by the shareholders present at shareholders' meeting is not sufficient to meet the criteria specified in the above mentioned, the resolution to be made thereto may be adopted by two-thirds or more of the attending shareholders who represent a majority of the total number of its outstanding shares:</p> <p>1. A company enters into, amend, or terminate any contract for lease of</p>	<p>1. Article 185 of the Company Act  2. Article 277 of the Company Act  3. Article 159 of the Company Act  4. Article 240 of the Company Act  5. Article 316 of the Company Act  6. Article 29 of Business Mergers And Acquisitions Act</p>	<p>1. According to Article 60 of the Company Law of Cayman Islands, a special resolution means a resolution that has been passed by a majority of not less than two-thirds (where there is any higher percentage of the total number of the voting rights is required in the Articles of Association, such higher percentage shall prevail) of such members as, being entitled to do so, vote in person or, where a power of attorney is allowed, by a proxy at a shareholders' meeting. As usually prescribed by a general Cayman Company's Articles of Association, a special resolution by which such proposal should be adopted shall be specified in the shareholders' meeting</p>	<p>1. Article 1.1 of the Company's Articles of Association  (a) Provisions of the Company's Articles of Association  According to Article 1.1 of the Company's Articles of Association, a special resolution means "a resolution passed by a majority of not less than two-thirds of votes cast by such Members as, being entitled so to do, vote in person or, where proxies are allowed, by proxy at a general meeting of which notice specifying the intention to propose the resolution as a special resolution has been duly given. means a resolution passed by a majority of not less than two-thirds of votes cast</p>

<b>Matters of material significance on the protection of shareholders' rights and interests</b>	<b>Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"</b>	<b>Regulations relating to the laws of the foreign issuer's country of registration place</b>	<b>Provisions in the Company's Articles of Association and reasons for the discrepancy</b>
<p>the company's business in whole, or for entrusted business, or for regular joint operation with others, transfer the whole or any essential part of its business or assets, accept the transfer of another's whole business or assets, which has great bearing on the business operation of the company</p> <p>2. Modification or alteration of the Articles of Association</p> <p>3. Any modification or alteration in the Articles of Association prejudicial to the privileges of special shareholders shall be adopted by a meeting of special shareholders additionally</p> <p>4. Have the whole or a part of the surplus profit distributable as dividends and bonuses distributed in the form of new shares to be issued by the company for such purpose</p> <p>5. A resolution for dissolution, consolidation or merger, or split-up of a company</p> <p>6. Share Swap</p>		<p>notice. A written resolution signed by all shareholders, provided that it has been authorized by the company's Articles of Association, is also deemed as a special resolution made. When the number of votes is required in the manner for exercising the voting power to calculate whether it belongs to a majority of special resolution, the company's Articles of Association may specify the total number of votes entitled to each shareholder.</p> <p>2. According to the Company Law of Cayman Islands, matters that require a special resolution include: (i) change the company name (Article 31); (ii) alter or add to articles of association (Article 24); (iii) alter or add to the memorandums of association with respect to any objects, powers or other matters specified therein (Article 10); (iv) reduce share capital and any capital redemption reserve (Article 14 and 37(4)(d)); (v) wind up voluntarily for reasons other than that the company is unable to pay its debts as they fall due; and (vi) merger or consolidation with other company. Additionally, according to Article 18.1 of the Company's Articles of Association, "No business shall be transacted at any general meeting unless a quorum is present. Unless otherwise provided in the Statute, the Articles and the Applicable Public Company Rules, Members present in person or by proxy, representing more than one-half of the total issued, outstanding Shares, shall constitute a quorum for</p>	<p>by such Members as, being entitled so to do, vote in person or, where proxies are allowed, by proxy at a general meeting of which notice specifying the intention to propose the resolution as a special resolution has been duly given." According to the Cayman Islands legal opinions, matters that require a special resolution include but are not limited to: (i) change the company name; (ii) alter or add to Articles of Association; (iii) alter or add to the memorandums of association with respect to any objects, powers or other matters specified therein; (iv) reduce share capital and any capital redemption reserve; (v) wind up voluntarily for reasons other than that the company is unable to pay its debts as they fall due; and (vi) merger or consolidation with other company. Additionally, according to Article 18.1 of the Company's Articles of Association, "No business shall be transacted at any general meeting unless a quorum is present. Unless otherwise provided in the Statute, the Articles and the Applicable Public Company Rules, Members present in person or by proxy, representing more than one-half of the total issued, outstanding Shares, shall constitute a quorum for</p>

<p><b>Matters of material significance on the protection of shareholders' rights and interests</b></p>	<p><b>Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"</b></p>	<p><b>Regulations relating to the laws of the foreign issuer's country of registration place</b></p> <p>the majority threshold for a matter that requires a special resolution is deemed invalid</p> <p>3. For matters other than those stated above, the Company Law of Cayman Islands does not require them to be adopted by a certain majority; however, it may be prescribed in the company's Articles of Association.</p>	<p><b>Provisions in the Company's Articles of Association and reasons for the discrepancy</b></p> <p>any general meeting." That is, a special resolution may be adopted at a shareholders' meeting attended by a majority of shares issued and outstanding in person or by a proxy, and in which at least two-thirds of the votes cast by the shareholders present (including shareholders present by a proxy) are in favor of the resolution.</p> <p>(b) Reasons for discrepancy</p> <p>According to the Cayman Islands legal opinions, the special resolution is subject to the Company Law of Cayman Islands, and according to which, any resolution adopted by shareholders lower than the majority threshold for a matter that requires a special resolution is deemed invalid. And Article 1.1 of the company's Articles of Association defines separately "Supermajority Resolution" as "a resolution adopted by a majority vote of the Members present and entitled to vote on such resolution at a general meeting attended in person or by proxy by Members who represent two-thirds or more of the total issued, outstanding Shares of the Company or, (ii) if the total number of Shares represented by the Members present at the general meeting is less than</p>
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<p><b>Matters of material significance on the protection of shareholders' rights and interests</b></p>	<p><b>Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"</b></p>	<p><b>Regulations relating to the laws of the foreign issuer's country of registration place</b></p>	<p><b>Provisions in the Company's Articles of Association and reasons for the discrepancy</b></p>
			<p>two-thirds of the total issued, outstanding Shares of the Company, but more than half of the total issued, outstanding Shares of the Company, a resolution adopted at such general meeting by the Members who represent two-thirds or more of the Shares present and entitled to vote on such resolution.”</p> <p>For any matter of material significance on the protection of shareholders' rights and interests as stated left, if it should be adopted by a special resolution pursuant to the Company Law of Cayman Islands, it will be still listed as one of matters under “Special Resolution” in the company's Articles of Association; otherwise, it will be listed as one of matters under “Supermajority Resolution.”</p> <p>2. Article 14.3 of the company's Articles of Association (moved to Article 14.4 if the proposed amendment to the Articles of Association is adopted at the annual general meeting of 2018)</p> <p>(a) Provisions of the company's Articles of Association: According to Article 14.3 of the company's Articles of Association, “Subject to the provisions of the Statute, the Articles, and the Applicable Public Company Rules,</p>

<p><b>Matters of material significance on the protection of shareholders' rights and interests</b></p>		<p><b>Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"</b></p>	<p><b>Regulations relating to the laws of the foreign issuer's country of registration place</b></p>	<p><b>Provisions in the Company's Articles of Association and reasons for the discrepancy</b></p>
				<p>with regard to the dissolution procedures of the Company, the Company shall pass (a) Supermajority Resolution, if the Company resolves that it be wound up voluntarily because it is unable to pay its debts as they fall due; or (b) a Special Resolution, if the Company resolves that it be wound up voluntarily for reasons other than the reason stated in Article 14.3(a) above." The slight difference between it and the matters of material significance on the protection of shareholders' rights and interests as stated left lies in: based on the reasons for resolution to dissolve, the company's Articles of Association lists the resolution for dissolution as one of matters under "Supermajority Resolution" or "Special Resolution," respectively. In comparison, the matters of material significance on the protection of shareholders' rights and interests always require to be adopted by "Supermajority Resolution."</p> <p>(b) Reasons for discrepancy: According to the Cayman Islands legal opinions, the Company Law of Cayman Islands provides that a company shall resolve that it be wound up voluntarily for reasons</p>

<p><b>Matters of material significance on the protection of shareholders' rights and interests</b></p>	<p><b>Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"</b></p>	<p><b>Regulations relating to the laws of the foreign issuer's country of registration place</b></p>	<p><b>Provisions in the Company's Articles of Association and reasons for the discrepancy</b></p>
			<p>other than being unable to pay its debts as they fall due by a special resolution. Thus the difference arises out of the laws of Cayman Islands. From the above, we can know that such difference comes from what is limited by law of Cayman Islands. Therefore, "if the Company resolves that it be wound up voluntarily because it is unable to pay its debts as they fall due," a Supermajority Resolution shall be adopted at the shareholders' meeting as prescribed in the company's Articles of Association, while a company is being wound up voluntarily for reasons other than the reason stated in Article 14.3(a), it will be listed as one of matters under "Special Resolution" as required by the Company Law of Cayman Islands. Such difference comes from what is limited by law of Cayman Islands, which should not have a material adverse effect on the Company's shareholders' rights and interests.</p>
<p><b>III. Authorities and responsibilities of directors and supervisors</b></p>			
<p>The remuneration of directors, if not prescribed in the Articles of Association, shall be determined by a meeting of shareholders and cannot be ratified by a meeting of shareholders.</p>	<p>Paragraph 1, Article 196 of the Company Act</p>	<p>The Company Law of Cayman Islands does not clearly specify how to determine remuneration of directors; however, it may be prescribed in the company's Articles of Association.</p>	<p>Although neither the remuneration of directors is clearly specified nor it shall be determined by a meeting of shareholders is specified in the company's Articles of Association, referring to per Explanation Shang-Zi No. 09302030870 filed on March 8,</p>

Matters of material significance on the protection of shareholders' rights and interests	Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"	Regulations relating to the laws of the foreign issuer's country of registration place	Provisions in the Company's Articles of Association and reasons for the discrepancy
<p>In case a director has, in the course of performing his/her duties, committed any act resulting in material damages to the company or in serious violation of applicable laws and/or regulations, but not discharged by a resolution of the shareholders' meeting, the shareholder(s) holding 3% or more of the total number of outstanding shares of the company may, within 30 days after that shareholders' meeting, institute a lawsuit in the court for a judgment in respect of such matter. The Taiwan Taipei District Court, R.O.C, may be the court of the first instance for this matter.</p>	<p>Article 200 of the Company Act</p>	<p>1. The Company Law of Cayman Islands does not clearly specify that the minority shareholders may institute a lawsuit in the court of Cayman Islands for discharge of directors.</p> <p>2. In general, the procedure for discharge of directors is prescribed in the company's Articles of Association, and that an ordinary resolution should be adopted at the shareholders' meeting is typically prescribed.</p> <p>3. According to shareholders' remedies required by the common law, in a lawsuit accusing a director of bringing about infringement to the company, the proper plaintiff in form should be the company per se and not an individual shareholder or minority shareholders. There are only a few of exceptions for the above principle,</p>	<p>2004 by the Ministry of Economic Affairs and the "Regulations Governing the Appointment and Exercise of Powers by the Remuneration Committee of a Company Whose Stock is Listed on the Stock Exchange or Traded Over the Counter," the Company's Board of Director has established a remuneration committee. Therefore, the provisions as stated left should not have a material adverse effect on the Company's shareholders' rights and interests.</p> <p>(1) Provisions of the company's Articles of Association: According to Article 28.2 (j) of the company's Articles of Association, "Subject to the provisions of the Statute, and the Articles or the Applicable Public Company Rules, in the event that he has, in the course of performing his duties, committed any act resulting in material damage to the Company or in serious violation of applicable laws and/or regulations or the Memorandum and the Articles, but has not been removed by the Company pursuant to a Supermajority Resolution vote, then any Member(s) holding 3% or more of the total number of issued, outstanding Shares shall have the right, within thirty days after that general meeting, to petition any competent court for the removal of such Director, at the Company's</p>

<p><b>Matters of material significance on the protection of shareholders' rights and interests</b></p>	<p><b>Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"</b></p>	<p><b>Regulations relating to the laws of the foreign issuer's country of registration place</b></p> <p>including that when the conduct of a director constitutes a fraud against the minority shareholders and the person who commits such fraud is a company's controller, the minority shareholders who have suffered the fraud may institute a lawsuit in the court.</p> <p>4. Since the court of the Cayman Islands cannot ratify and enforce foreign non-monetary judgments before re-examination on the legal basis of the said dispute, such stipulation added in the company's Articles of Association may not be executed under the Company Law of Cayman Islands. Directors may be discharged according to the procedure prescribed in the Company's Articles of Association.</p>	<p><b>Provisions in the Company's Articles of Association and reasons for the discrepancy</b></p>
<p>expense and such Director shall be removed upon the final judgment by such court. For clarification, if a relevant court has competent jurisdiction to adjudicate all of the foregoing matters in a single or a series of proceedings, then, for the purpose of this paragraph (j), final judgment shall be given by such competent court." It is slightly different from the matters of material significance on the protection of shareholders' rights and interests as stated left.</p> <p>(2)Reasons for discrepancy: The Company Law of Cayman Islands does not clearly specify that the minority shareholders are allowed to enter a petition in the court of Cayman Islands for discharge of directors. Under the common law, the subrogation litigation of shareholders will be claimed only under rare circumstances. Thus the company's Articles of Association prescribes that a shareholder shall institute a lawsuit in a competent court. Since shareholders may discharge a directors according to the company's Articles of Association, it should not have a material adverse effect on the Company's shareholders' rights and interests.</p>			



<b>Matters of material significance on the protection of shareholders' rights and interests</b>	<b>Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"</b>	<b>Regulations relating to the laws of the foreign issuer's country of registration place</b>	<b>Provisions in the Company's Articles of Association and reasons for the discrepancy</b>
<ol style="list-style-type: none"> <li>1. Supervisors of a company shall be elected by the meeting of shareholders, among them at least one supervisor shall have a domicile within the territory of the Republic of China.</li> <li>2. The term of office of a supervisor shall not exceed three years, but he may be eligible for re-election.</li> <li>3. In case all supervisors of a company are discharged, the Board of Directors shall, within sixty (60) days, convene a special meeting of shareholders to elect new supervisors.</li> <li>4. Supervisors shall supervise the execution of business operations of the company, and may at any time or from time to time investigate the business and financial conditions of the company, examine the accounting books and documents, and request the Board of Directors or managerial personnel to make reports thereon.</li> <li>5. Supervisors shall audit the various statements and records prepared for submission to the shareholders' meeting by the Board of Directors, and shall make a report of their findings and opinions at the meeting of shareholders.</li> <li>6. In performing their functional duties of auditing, the supervisors may</li> </ol>	<p>Article 216 to 222 of the Company Act</p>	<p>The Company Law of Cayman Islands has no corresponding concept of "Supervisor." The effect that supervisors are installed in accordance with the company's Articles of Association is not clear.</p>	<p>Article 32.6 of the company's Articles of Association</p> <p>As described in the former section of Paragraph 2, Article 28-4 of Taiwan Stock Exchange Corporation Rules Governing Review of Securities Listings "A foreign issuer shall install either an audit committee or supervisors". The Company has installed an audit committee by all independent directors (Article 32.6 of Articles of Association); therefore, supervisors are not required to be installed additionally. Such difference should not have a material adverse effect on the Company's shareholders' rights and interests.</p>

Matters of material significance on the protection of shareholders' rights and interests	Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"	Regulations relating to the laws of the foreign issuer's country of registration place	Provisions in the Company's Articles of Association and reasons for the discrepancy
<p>appoint a certified public accountant to conduct the auditing in their behalf.</p> <p>7. Supervisors of a company may attend the meeting of the Board of Directors to give their opinions. In case the Board of Directors or any director commits any act, in carrying out the business operations of the company, in a manner in violation of the laws, regulations, the Articles of Incorporation or the resolutions of the shareholders' meeting, the supervisors shall forthwith advise, by a notice, to the Board of Directors or the Director, as the case may be, to cease such act.</p> <p>8. The supervisors may each exercise the supervision power individually.</p> <p>9. A supervisor shall not be concurrently a director, a managerial officer or other staff/employee of the company.</p>	<p>Article 200, 214, 220 and 227 of the Company Act</p>		
<p>1. Shareholder(s) who has/have been continuously holding 1% or more of the total number of the outstanding shares of the company over six months may request in writing the supervisors of the company to institute, for the company, an action against a director of the company. The Taiwan Taipei District Court, R.O.C, may be the court of the first instance for this matter.</p>	<p>Article 200, 214, 220 and 227 of the Company Act</p>	<p>1. The Company Law of Cayman Islands has no corresponding concept of "Supervisor." The effect that supervisors are installed in accordance with the company's Articles of Association is not clear.</p> <p>2. According to shareholders' remedies required by the common law, in a lawsuit accusing a director of bringing about infringement to the company, the proper plaintiff in form</p>	<p>Article 25.6 of the company's Articles of Association</p> <p>As described in the former section of Paragraph 2, Article 28-4 of Taiwan Stock Exchange Corporation Rules Governing Review of Securities Listings "A foreign issuer shall install either an audit committee or supervisors." The Company has installed an audit committee by all independent directors;</p>

Matters of material significance on the protection of shareholders' rights and interests	Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"	Regulations relating to the laws of the foreign issuer's country of registration place	Provisions in the Company's Articles of Association and reasons for the discrepancy
<p>2. In case the supervisors fail to institute an action within 30 days after having received the request made by shareholder(s), then the shareholders filing such request may institute the action for the company. The Taiwan Taipei District Court, R.O.C, may be the court of the first instance for this matter.</p> <p>3. In addition to the events that the board of directors does not or is unable to convene a shareholders meeting, the supervisors or audit committee may, for the benefit of the company, convene shareholders meeting when necessary.</p>		<p>should be the company per se and not an individual shareholder or minority shareholders. There are only a few of exceptions for the above principle, including that when the conduct of a director constitutes a fraud against the minority shareholders and the person who commits such fraud is a company's controller, the minority shareholders who have suffered the fraud may institute a lawsuit in the court.</p> <p>3. Since the court of the Cayman Islands cannot ratify and enforce foreign non-monetary judgments before re-examination on the legal basis of the said dispute, such stipulation added in the company's Articles of Association may not be executed under the Company Law of Cayman Islands. Directors may be discharged according to the procedure prescribed in the company's Articles of Association.</p>	<p>therefore, supervisors are not required to be installed additionally. Such difference should not have a material adverse effect on the Company's shareholders' rights and interests.</p>
<p>In case a director or supervisor (applicable to companies who install supervisors) of a company whose shares are issued to the public has created a pledge on the company's shares more than half of the company's shares being held by him/her/it at the time he/she/it is elected, the voting power of the excessive portion of shares shall not be exercised and the excessive portion of</p>	<p>Articles 197-1 and 227 of the Company Act</p>	<p>The fact that shares held by directors shall have no voting power (under which circumstances) is not required by the Company Law of Cayman Islands; however, the relevant procedures may be prescribed in the Articles of Association.</p>	<p>Article 24.3 of the company's Articles of Association</p> <p>In addition, as described in the former section of Paragraph 2, Article 28-4 of Taiwan Stock Exchange Corporation Rules Governing Review of Securities Listings "A foreign issuer shall install either an audit committee or supervisors". The Company has installed</p>

Matters of material significance on the protection of shareholders' rights and interests	Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"	Regulations relating to the laws of the foreign issuer's country of registration place	Provisions in the Company's Articles of Association and reasons for the discrepancy
<p>shares shall not be counted in the number of votes of shareholders present at the meeting.</p>			<p>an audit committee by all independent directors; therefore, supervisors are not required to be installed additionally. Such difference should not have a material adverse effect on the Company's shareholders' rights and interests. Thus supervisors are not included in the above mentioned Articles of Association. Such difference should not have a material adverse effect on the Company's shareholders' rights and interests.</p>
<p>1. The director of a company shall have the loyalty and shall exercise the due care of a good administrator in conducting the business operation of the company; and if he/she has acted contrary to this provision, shall be liable for the damages to be sustained by the company therefrom. In case the director of a company does anything for himself/herself or on behalf of another person, the meeting of shareholders may, by a resolution, consider the earnings in such an act as earnings of the company.</p> <p>2. If the director of a company has, in the course of conducting the business operations, violated any provision of the applicable laws and/or regulations and thus caused damage to any other person, he/she</p>	<p>Paragraph 2, Article 8, Paragraph 3, Article 23 of the Company Act Paragraph 1 and 2, Article 5 of Business Mergers And Acquisitions Act of Taiwan</p>	<p>1. The Company Law of Cayman Islands includes specifically obligations of directors as clear directions. According to the common law of Cayman Islands, each shareholder being liable to (1) fiduciary duties, and (2) exercise the due care of a good administrator for the company (duty of care). The company may claim compensation against the directors who have violated the above duties. In addition, directors who have violated their duties acquire interests shall be bound to return the same to the company.</p> <p>2. Based on principles of common law, in the course of operation for management of the company's businesses, the acts of a director representing the company will be deemed as the acts of the company</p>	<p>Article 26.5 of the company's Articles of Association</p> <p>However, if the director of a company has, in the course of conducting the business operations, violated any provision of the applicable laws and/or regulations and thus caused damage to any other person, such other person may not be able to claim compensation directly from such director under the law of Cayman Islands. Even the company's Articles of Association requires that the director shall be jointly liable for compensation with the company to the other person, the base of such claim will be unable to be created.</p> <p>In addition, although Article 26.5 of the company's Articles of Association has required that such clause of obligation is also applicable to managerial officers;</p>

<p><b>Matters of material significance on the protection of shareholders' rights and interests</b></p> <p>shall be liable, jointly and severally, for the damage to such other person.</p> <p>3. The managerial officer or supervisor of a company, acting within the scope of their duties, shall assume the liabilities for the damage in the same manner as directors of a company do.</p>	<p><b>Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"</b></p>	<p><b>Regulations relating to the laws of the foreign issuer's country of registration place</b></p> <p>per se. If the conduct thereof causes damage of any third party, the company, not the director, shall be bound to be liable the third party for the acts. The third party caused by the damage cannot demand from the company the compensation and impose obligations on the directors according to the company's Articles of Association. Any third party who is not a shareholder cannot execute it according to the company's Articles of Association. The company who is liable for the damage to be sustained by the third party because the directors who have violated the duties may claim reimbursement against the directors caused the damage.</p> <p>3. The managerial officer generally has no fiduciary duties for the company. Since managerial officers are not the parties pursuant to the Articles of Association, no execution effect is present even it is prescribed in the Articles of Association. The above duties shall be entered into the contracts with managerial officer.</p>	<p><b>Provisions in the Company's Articles of Association and reasons for the discrepancy</b></p> <p>however, it shall be entered into the contracts with managerial officers in accordance with the law of Cayman Islands. Therefore, if the responsibilities of managerial officers for the matters of material significance on the protection of shareholders' rights and interests as stated left will be implemented, the Company shall enter into the contracts with managerial officers. Such difference should not have a material adverse effect on the Company's shareholders' rights and interests.</p>
<p>Where a juristic person acts as a shareholder of a company, its authorized representative may be elected as a director or supervisor of the company. If there is a plural number of such authorized representatives, each of them</p>	<p>Paragraph 2, Article 27 of the Company Act</p>	<p>1. The fact that an authorized representative of a juristic person acting as a shareholder being elected as a director is not regulated by the Company Law of Cayman Islands;</p>	<p>Article 27.4 of the Company's Articles of Association</p> <p>As described in the former section of Paragraph 2, Article 28-4 of Taiwan Stock Exchange Corporation Rules</p>

<p><b>Matters of material significance on the protection of shareholders' rights and interests</b></p> <p>may be so elected, but such authorized representatives may not concurrently be selected or serve as the director or supervisor of the company.</p>	<p><b>Applicable laws and regulations of "Company Act" or "Securities and Exchange Act"</b></p>	<p><b>Regulations relating to the laws of the foreign issuer's country of registration place</b></p> <p>however, it may be prescribed in the Articles of Association.  2.The Company Law of Cayman Islands has no corresponding concept of "Supervisor." The effect that supervisors are installed in accordance with the company's Articles of Association is not clear.</p>	<p><b>Provisions in the Company's Articles of Association and reasons for the discrepancy</b></p> <p>Governing Review of Securities Listings "A foreign issuer shall install either an audit committee or supervisors." The Company has installed an audit committee by all independent directors; therefore, supervisors are not required to be installed additionally. Such difference should not have a material adverse effect on the Company's shareholders' rights and interests. Thus supervisors are not included in the above mentioned Articles of Association. Such difference should not have a material adverse effect on the Company's shareholders' rights and interests.</p>
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**8.6 Any Events in 2020 and as of the Date of Publication of the Annual Report that Had Significant Impacts on Shareholders' Right or Security Prices as Stated in Article 36-3-2 of the Securities and Exchange Law of Taiwan**

None.

## **INDEPENDENT AUDITORS' REPORT**

The Board of Directors and Shareholders  
Alchip Technologies, Limited

### **Opinion**

We have audited the accompanying consolidated financial statements of Alchip Technologies, Limited and its subsidiaries (collectively referred to as the Group), which comprise the consolidated balance sheets as of December 31, 2020 and 2019, and the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2020 and 2019, 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 audit 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 Auditor's 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 Certificate Public Account of Republic of China, and we have fulfilled our other ethical responsibilities in accordance with the requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for the opinion.

### **Key Audit Matters**

Key audit matters are matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements for the year ended December 31, 2020. 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 matter for the Group's consolidated financial statements for the year ended December 31, 2020 is stated as follows:

#### Impairment Assessment of Equipment

As described in Note 5 of the consolidated financial statements, when the equipment related to integrated circuit production has any indication of impairment, the Group evaluates impairment loss based on the recoverable amount of equipment (which is higher of its fair value less costs to sell or value-in-use). The recoverable amount, which is estimated based on the anticipation of the product life cycle, projected production volume, and market price, is subject to a risk of changes in relation to the assumptions that could result in additional or reversal of impairment loss. Consequently, the impairment assessment of equipment is deemed to be a key audit matter.

Our main audit procedures in respect to assessment thereof included the following:

1. Assessed the internal and external information the management used when assessing whether there is any indication of impairment;
2. Inspected the methodologies applied for the determination of the recoverable amount and the projected sales forecasts prepared by the management and evaluated the appropriateness of the impairment assessment performed by the management.

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

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRS, IAS, IFRIC, and 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, the 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.

#### **Auditor's Responsibilities for the Audit of the Consolidated Financial Statements**

Our objectives are to obtain reasonable assurance on whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's 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 be reasonably be expected to influence the economic decision 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 judgement and maintain professional skepticism throughout the audit. We also:

1. Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than the 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 the 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 auditor's 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 auditor's 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 for the financial information of entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for 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 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 consolidated financial statements for the year ended December 31, 2020, and are therefore the key audit matter. We describe these matters in our auditor's report unless law or regulations precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audit resulting in this independent auditors' report are Yi-Wen Wang and Shih-Tsung Wu.

Deloitte & Touche  
Taipei, Taiwan  
Republic of China

March 5, 2021

Notice to Readers

*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.*

## ALCHIP TECHNOLOGIES, LIMITED AND SUBSIDIARIES

### CONSOLIDATED BALANCE SHEETS DECEMBER 31, 2020 AND 2019 (In Thousands of New Taiwan Dollars)

ASSETS	2020		2019	
	Amount	%	Amount	%
<b>CURRENT ASSETS</b>				
Cash and cash equivalents (Note 6)	\$ 4,587,817	50	\$ 2,377,250	46
Financial assets at fair value through other comprehensive income (Note 7)	33,084	-	103,208	2
Financial assets at amortized cost (Note 8)	427,200	5	-	-
Accounts receivable, net (Note 10)	580,984	6	898,115	17
Other receivable	36,861	1	22,230	-
Inventories (Note 11)	947,774	10	581,577	11
Prepayments (Note 16)	1,050,042	12	82,871	2
Other current assets	<u>29,678</u>	<u>-</u>	<u>42,996</u>	<u>1</u>
Total current assets	<u>7,693,440</u>	<u>84</u>	<u>4,108,247</u>	<u>79</u>
<b>NON-CURRENT ASSETS</b>				
Financial assets at fair value through other comprehensive income (Note 7)	320,483	4	354,372	7
Property, plants, and equipment (Note 13)	814,549	9	389,422	7
Right-of-use assets (Note 14)	107,554	1	110,085	2
Intangible assets (Note 15)	123,696	1	221,553	4
Deferred tax assets (Note 24)	37,290	1	26,400	1
Other non-current assets	<u>15,968</u>	<u>-</u>	<u>14,987</u>	<u>-</u>
Total non-current assets	<u>1,419,540</u>	<u>16</u>	<u>1,116,819</u>	<u>21</u>
<b>TOTAL</b>	<u>\$ 9,112,980</u>	<u>100</u>	<u>\$ 5,225,066</u>	<u>100</u>
<b>LIABILITIES AND EQUITY</b>				
<b>CURRENT LIABILITIES</b>				
Short-term borrowing (Note 17)	\$ -	-	\$ 15,496	-
Contract liabilities (Note 22)	3,981,276	44	774,994	15
Accounts payable	367,512	4	415,035	8
Other payables (Note 18)	514,776	6	474,897	9
Current tax liabilities (Note 24)	222,040	2	44,984	1
Lease liabilities (Note 14)	41,914	-	37,692	1
Deferred revenue (Note 21)	598	-	43,951	1
Other current liabilities	<u>3,275</u>	<u>-</u>	<u>8,617</u>	<u>-</u>
Total current liabilities	<u>5,131,391</u>	<u>56</u>	<u>1,815,666</u>	<u>35</u>
<b>NON-CURRENT LIABILITIES</b>				
Deferred tax liabilities (Note 24)	776	-	12,209	-
Lease liabilities (Note 14)	71,904	1	73,689	1
Deferred revenue	<u>20,667</u>	<u>-</u>	<u>21,757</u>	<u>1</u>
Total non-current liabilities	<u>93,347</u>	<u>1</u>	<u>107,655</u>	<u>2</u>
Total liabilities	<u>5,224,738</u>	<u>57</u>	<u>1,923,321</u>	<u>37</u>
<b>EQUITY ATTRIBUTABLE TO OWNERS OF THE COMPANY (Notes 19 and 20)</b>				
Share capital	<u>620,285</u>	<u>7</u>	<u>606,129</u>	<u>12</u>
Capital surplus	<u>1,684,359</u>	<u>18</u>	<u>1,534,620</u>	<u>29</u>
Retained earnings				
Special reserve	67,693	1	67,693	1
Unappropriated earnings	<u>1,717,862</u>	<u>19</u>	<u>1,097,056</u>	<u>21</u>
Total retained earnings	<u>1,785,555</u>	<u>20</u>	<u>1,164,749</u>	<u>22</u>
Other equity	<u>(201,957)</u>	<u>(2)</u>	<u>(3,753)</u>	<u>-</u>
Total equity	<u>3,888,242</u>	<u>43</u>	<u>3,301,745</u>	<u>63</u>
<b>TOTAL</b>	<u>\$ 9,112,980</u>	<u>100</u>	<u>\$ 5,225,066</u>	<u>100</u>

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

## ALCHIP TECHNOLOGIES, LIMITED AND SUBSIDIARIES

### CONSOLIDATED BALANCE SHEETS DECEMBER 31, 2020 AND 2019 (In Thousands of U.S. Dollars)

ASSETS	2020		2019	
	Amount	%	Amount	%
<b>CURRENT ASSETS</b>				
Cash and cash equivalents (Note 6)	\$ 161,089	50	\$ 79,295	46
Financial assets at fair value through other comprehensive income (Note 7)	1,162	-	3,443	2
Financial assets at amortized cost (Note 8)	15,000	5	-	-
Accounts receivable, net (Note 10)	20,400	6	29,957	17
Other receivable	1,294	1	742	-
Inventories (Note 11)	33,279	10	19,399	11
Prepayments (Note 16)	36,869	12	2,764	2
Other current assets	<u>1,042</u>	<u>-</u>	<u>1,433</u>	<u>1</u>
Total current assets	<u>270,135</u>	<u>84</u>	<u>137,033</u>	<u>79</u>
<b>NON-CURRENT ASSETS</b>				
Financial assets at fair value through other comprehensive income (Note 7)	11,253	4	11,820	7
Property, plants, and equipment (Note 13)	28,601	9	12,989	7
Right-of-use assets (Note 14)	3,776	1	3,672	2
Intangible assets (Note 15)	4,343	1	7,390	4
Deferred tax assets (Note 24)	1,309	1	881	1
Other non-current assets	<u>561</u>	<u>-</u>	<u>500</u>	<u>-</u>
Total non-current assets	<u>49,843</u>	<u>16</u>	<u>37,252</u>	<u>21</u>
<b>TOTAL</b>	<u>\$ 319,978</u>	<u>100</u>	<u>\$ 174,285</u>	<u>100</u>
<b>LIABILITIES AND EQUITY</b>				
<b>CURRENT LIABILITIES</b>				
Short-term borrowing (Note 17)	\$ -	-	\$ 517	-
Contract liabilities (Note 22)	139,792	44	25,850	15
Accounts payable	12,904	4	13,844	8
Other payables (Note 18)	18,075	6	15,840	9
Current tax liabilities (Note 24)	7,796	2	1,500	1
Lease liabilities (Note 14)	1,472	-	1,257	1
Deferred revenue (Note 21)	21	-	1,466	1
Other current liabilities	<u>115</u>	<u>-</u>	<u>288</u>	<u>-</u>
Total current liabilities	<u>180,175</u>	<u>56</u>	<u>60,562</u>	<u>35</u>
<b>NON-CURRENT LIABILITIES</b>				
Deferred tax liabilities (Note 24)	27	-	407	-
Lease liabilities (Note 14)	2,525	1	2,458	1
Deferred revenue	<u>726</u>	<u>-</u>	<u>726</u>	<u>1</u>
Total non-current liabilities	<u>3,278</u>	<u>1</u>	<u>3,591</u>	<u>2</u>
Total liabilities	<u>183,453</u>	<u>57</u>	<u>64,153</u>	<u>37</u>
<b>EQUITY ATTRIBUTABLE TO OWNERS OF THE COMPANY (Notes 19 and 20)</b>				
Share capital	<u>19,512</u>	<u>6</u>	<u>19,034</u>	<u>11</u>
Capital surplus	<u>54,397</u>	<u>17</u>	<u>49,324</u>	<u>28</u>
Retained earnings				
Special reserve	2,799	1	2,799	2
Unappropriated earnings	<u>59,222</u>	<u>19</u>	<u>38,183</u>	<u>22</u>
Total retained earnings	<u>62,021</u>	<u>20</u>	<u>40,982</u>	<u>24</u>
Other equity	<u>595</u>	<u>-</u>	<u>792</u>	<u>-</u>
Total equity	<u>136,525</u>	<u>43</u>	<u>110,132</u>	<u>63</u>
<b>TOTAL</b>	<u>\$ 319,978</u>	<u>100</u>	<u>\$ 174,285</u>	<u>100</u>

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

# ALCHIP TECHNOLOGIES, LIMITED AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019

(In Thousands of New Taiwan Dollars and U.S. Dollars, Except Earnings Per Share)

	2020			2019		
	US\$	NT\$	%	US\$	NT\$	%
OPERATING REVENUE (Note 22)	\$ 239,565	\$ 7,078,919	100	\$ 140,138	\$ 4,331,956	100
OPERATING COST (Notes 12 and 23)	<u>161,483</u>	<u>4,771,652</u>	<u>67</u>	<u>88,021</u>	<u>2,720,914</u>	<u>63</u>
GROSS PROFIT	<u>78,082</u>	<u>2,307,267</u>	<u>33</u>	<u>52,117</u>	<u>1,611,042</u>	<u>37</u>
OPERATING EXPENSES (Note 23)						
Selling and marketing expenses	5,029	148,607	2	4,468	138,114	3
General and administrative expenses	13,055	385,771	6	10,258	317,082	7
Research and development expenses	26,537	784,117	11	22,183	685,741	16
Expected credit losses impairment loss on trade receivable	<u>55</u>	<u>1,629</u>	<u>-</u>	<u>1,204</u>	<u>37,227</u>	<u>1</u>
Total operating expenses	<u>44,676</u>	<u>1,320,124</u>	<u>19</u>	<u>38,113</u>	<u>1,178,164</u>	<u>27</u>
INCOME FROM OPERATIONS	<u>33,406</u>	<u>987,143</u>	<u>14</u>	<u>14,004</u>	<u>432,878</u>	<u>10</u>
NON-OPERATING INCOME AND EXPENSES (Note 23)						
Interest income(Note 21)	1,140	33,676	-	1,840	56,840	1
Other income	2,632	77,779	1	1,492	46,174	1
Other gains and losses	151	4,449	-	66	2,030	-
Finance costs	(134)	(3,954)	-	(146)	(4,516)	-
Expected credit losses	<u>(450)</u>	<u>(13,303)</u>	<u>-</u>	<u>(263)</u>	<u>(8,123)</u>	<u>-</u>
Total non-operating income and expenses	<u>3,339</u>	<u>98,647</u>	<u>1</u>	<u>2,989</u>	<u>92,405</u>	<u>2</u>
PROFIT BEFORE INCOME TAX	36,745	1,085,790	15	16,993	525,283	12
INCOME TAX EXPENSES (Note 24)	<u>8,490</u>	<u>250,873</u>	<u>3</u>	<u>2,969</u>	<u>91,771</u>	<u>2</u>
NET PROFIT	<u>28,255</u>	<u>834,917</u>	<u>12</u>	<u>14,024</u>	<u>433,512</u>	<u>10</u>
OTHER COMPREHENSIVE INCOME (LOSS)						
Items that will not be reclassified subsequently to profit or loss:						
Exchange differences arising on translation to the presentation currency	-	( 192,410)	( 3)	-	(83,190)	( 2)
Items that may be reclassified subsequently to profit or loss:						
Exchange differences arising from translating foreign operations	118	3,480	-	32	975	-
Unrealized gain (loss) loss on investments in debt instrument at fair value through other comprehensive income	<u>( 315)</u>	<u>( 9,274)</u>	<u>-</u>	<u>1,086</u>	<u>33,576</u>	<u>1</u>
Other comprehensive income (loss) for the year, net of income tax	<u>( 197)</u>	<u>( 198,204)</u>	<u>( 3)</u>	<u>1,118</u>	<u>(48,639)</u>	<u>( 1)</u>
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	<u>\$ 28,058</u>	<u>\$ 636,713</u>	<u>9</u>	<u>\$ 15,142</u>	<u>\$ 384,873</u>	<u>9</u>
NET INCOME ATTRIBUTABLE TO Shareholders of the Company	<u>\$ 28,255</u>	<u>\$ 834,917</u>	<u>12</u>	<u>\$ 14,024</u>	<u>\$ 433,512</u>	<u>10</u>
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO Shareholders of the Company	<u>\$ 28,058</u>	<u>\$ 636,713</u>	<u>9</u>	<u>\$ 15,142</u>	<u>\$ 384,873</u>	<u>9</u>
EARNINGS PER SHARE (Note 25)						
Basic earnings per share	<u>\$ 0.46</u>	<u>\$ 13.61</u>		<u>\$0.23</u>	<u>\$7.20</u>	
Diluted earnings per share	<u>\$ 0.43</u>	<u>\$ 12.64</u>		<u>\$0.22</u>	<u>\$6.89</u>	

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

**ALCHIP TECHNOLOGIES, LIMITED AND SUBSIDIARIES**

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY  
FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019  
(In Thousands of New Taiwan Dollars)

	Share Capital	Capital Surplus		Special Reserve	Retained Earnings		Other Equity			Total Equity
		Share Premium	Share Options		Total	Unappropriated Earnings	Total	Exchange Differences on Translating the Financial Statements of Foreign Operations	Unrealized Gain (Loss) on Financial Assets at Fair Value Through Other Comprehensive Income	
BALANCE AT JANUARY 1, 2019	\$ 597,731	\$ 1,376,724	\$ 79,636	\$ 1,456,360	\$ 67,693	\$ 754,229	\$ 821,922	\$ 49,699	\$ (4,813)	\$ 2,920,899
Appropriation of 2018 earnings	-	-	-	-	-	(90,685)	(90,685)	-	-	(90,685)
Cash dividends	-	-	-	-	-	-	-	-	-	-
Share-based compensation	-	-	52,884	52,884	-	-	-	-	-	52,884
Issuance of ordinary shares under the employee share options	8,398	43,702	(18,326)	25,376	-	-	-	-	-	33,774
Net profit for the year ended December 31, 2019	-	-	-	-	-	433,512	433,512	-	-	433,512
Other comprehensive income for the year ended December 31, 2019	-	-	-	-	-	-	-	(82,215)	33,576	(48,639)
Total comprehensive income for the year ended December 31, 2019	-	-	-	-	-	433,512	433,512	(82,215)	33,576	384,873
BALANCE AT DECEMBER 31, 2019	606,129	1,420,426	114,194	1,534,620	67,693	1,097,056	1,164,749	(32,516)	28,763	3,301,745
Appropriation of 2019 earnings	-	-	-	-	-	(214,111)	(214,111)	-	-	(214,111)
Cash dividends	-	-	-	-	-	-	-	-	-	-
Share-based compensation	-	-	79,498	79,498	-	-	-	-	-	79,498
Issuance of ordinary shares under the employee share options	14,156	111,056	( 40,815)	70,241	-	-	-	-	-	84,397
Net profit for the year ended December 31, 2020	-	-	-	-	-	834,917	834,917	-	-	834,917
Other comprehensive income (loss) for the year ended December 31, 2020	-	-	-	-	-	-	-	(188,930)	(9,274)	(198,204)
Total comprehensive income (loss) for the year ended December 31, 2020	-	-	-	-	-	834,917	834,917	(188,930)	(9,274)	636,713
BALANCE AT DECEMBER 31, 2020	\$ 620,285	\$ 1,531,482	\$ 152,877	\$ 1,684,359	\$ 67,693	\$ 1,717,862	\$ 1,785,555	\$ (221,446)	\$ 19,489	\$ 3,888,242

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

**ALCHIP TECHNOLOGIES, LIMITED AND SUBSIDIARIES**

(USD) CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY  
FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019  
(In Thousands of U.S. Dollars)

	Share Capital	Capital Surplus		Special Reserve	Retained Earnings		Other Equity			Total Equity
		Share Premium	Share Options		Total	Unappropriated Earnings	Total	Exchange Differences on Translating the Financial Statements of Foreign Operations	Unrealized Gain (Loss) on Financial Assets at Fair Value Through Other Comprehensive Income	
BALANCE AT JANUARY 1, 2019	\$ 18,761	\$ 44,210	\$ 2,578	\$ 46,788	\$ 2,799	\$ 27,074	\$ 29,873	\$ (235)	\$ (91)	\$ 95,096
Appropriation of 2018 earnings	-	-	-	-	-	(2,915)	(2,915)	-	-	(2,915)
Cash dividends	-	-	-	-	-	-	-	-	-	-
Share-based compensation	-	-	1,711	1,711	-	-	-	-	-	1,711
Issuance of ordinary shares under the employee share options	273	1,418	(593)	825	-	-	-	-	-	1,098
Net profit for the year ended December 31, 2019	-	-	-	-	-	14,024	14,024	-	-	14,024
Other comprehensive income for the year ended December 31, 2019	-	-	-	-	-	-	-	32	1,086	1,118
Total comprehensive income for the year ended December 31, 2019	-	-	-	-	-	14,024	14,024	32	1,086	15,142
BALANCE AT DECEMBER 31, 2019	19,034	45,628	3,696	49,324	2,799	38,183	40,982	(203)	995	110,132
Appropriation of 2019 earnings	-	-	-	-	-	(7,216)	(7,216)	-	-	(7,216)
Cash dividends	-	-	-	-	-	-	-	-	-	-
Share-based compensation	-	-	2,690	2,690	-	-	-	-	-	2,690
Issuance of ordinary shares under the employee share options	478	3,720	(1,337)	2,383	-	-	-	-	-	2,861
Net profit for the year ended December 31, 2020	-	-	-	-	-	28,255	28,255	-	-	28,255
Other comprehensive income (loss) for the year ended December 31, 2020	-	-	-	-	-	-	-	118	(315)	(197)
Total comprehensive income (loss) for the year ended December 31, 2020	-	-	-	-	-	28,255	28,255	118	(315)	28,058
BALANCE AT DECEMBER 31, 2020	\$ 19,512	\$ 49,348	\$ 5,049	\$ 54,397	\$ 2,799	\$ 59,222	\$ 62,021	\$ (85)	\$ 680	\$ 136,525

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

# ALCHIP TECHNOLOGIES, LIMITED AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019 (In Thousands of New Taiwan Dollars and U.S. Dollars)

	2020		2019	
	US\$	NT\$	US\$	NT\$
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>				
Income before income tax	\$ 36,745	\$ 1,085,790	\$ 16,993	\$ 525,283
Adjustments for:				
Depreciation and amortization	36,996	1,093,182	30,045	928,748
Expected credit losses	505	14,932	1,467	45,350
Finance costs	134	3,954	146	4,516
Interest income	(1,140)	(33,676)	(1,840)	(56,840)
Share-based compensation	2,690	79,498	1,711	52,884
Loss (gain) on disposal of equipment	(98)	(2,887)	3	90
Net (gain) loss on disposal of financial assets	(120)	(3,560)	9	271
(Reversal of) write-down of inventories	1,511	44,661	(503)	(15,556)
Net (gain) loss on foreign currency exchange	194	5,817	(237)	(7,352)
Amortization of prepayments	3,865	114,197	3,246	100,327
Net changes in operating assets and liabilities				
Accounts receivable	9416	278,239	(9,289)	(287,130)
Other receivables	(646)	(19,099)	(351)	(10,846)
Inventories	(15,391)	(454,794)	(9,738)	(301,019)
Prepayments	(34,892)	(1,031,019)	(2,362)	(73,019)
Other current assets	391	11,586	(777)	(24,055)
Contract liabilities	113,942	3,366,870	15,530	480,063
Accounts payable	(878)	(25,972)	8,546	264,157
Other payables	5,637	166,571	4,292	132,664
Other current liabilities	(172)	(5,068)	227	7,023
Deferred revenue	(1,445)	(42,071)	149	4,600
Net cash generated from operations	157,244	4,646,521	57,267	1,770,159
Interest paid	(126)	(3,702)	(133)	(4,118)
Income tax paid	(3,001)	(88,729)	(3,291)	(101,662)
Net cash generated from operating activities	<u>154,117</u>	<u>4,554,090</u>	<u>53,843</u>	<u>1,664,379</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>				
Purchase of financial assets at fair value through other comprehensive income	(4,237)	(125,210)	(4,702)	(145,374)
Proceeds from sale of financial assets at fair value through other comprehensive income	6,405	189,319	1,232	38,068
Purchase of financial assets at amortized cost	(15,000)	(443,235)	(11,797)	(364,660)
Proceeds from sale of financial assets at amortized cost	-	-	31,384	970,139

(Continued)



## ALCHIP TECHNOLOGIES, LIMITED AND SUBSIDIARIES

### CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019 (In Thousands of New Taiwan Dollars and U.S. Dollars)

	2020		2019	
	US\$	NT\$	US\$	NT\$
Payments for property, plants, and equipment	(43,339)	(1,280,628)	(16,518)	(510,604)
Proceeds from disposal of property, plants, and equipment	158	4,658	-	6
Increase in refundable deposits	(69)	(2,063)	(5)	(154)
Payments for intangible assets	(11,252)	(332,481)	(11,420)	(352,973)
Interest received	<u>1,254</u>	<u>37,077</u>	<u>2,296</u>	<u>71,003</u>
Net cash used in investing activities	<u>(66,080)</u>	<u>(1,952,563)</u>	<u>(9,530)</u>	<u>(294,549)</u>
CASH FLOWS FROM FINANCING ACTIVITIES				
Increase(decrease) in short-term borrowings	(529)	(15,626)	500	15,456
Repayment of the principal portion of lease liabilities	(1,430)	(42,265)	(1,132)	(34,991)
Dividend paid to share holder of the company	(7,216)	(214,111)	(2,915)	(90,685)
Proceeds from exercise of employee share options	<u>2,861</u>	<u>84,397</u>	<u>1,098</u>	<u>33,774</u>
Net cash used in financing activities	<u>(6,314)</u>	<u>(187,605)</u>	<u>(2,449)</u>	<u>(76,446)</u>
EFFECTS OF EXCHANGE RATE CHANGES ON THE BALANCE OF CASH HELD IN FOREIGN CURRENCIES				
	<u>71</u>	<u>(203,355)</u>	<u>247</u>	<u>(58,247)</u>
NET INCREASE IN CASH AND CASH EQUIVALENTS	81,794	2,210,567	42,111	1,235,137
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	<u>79,295</u>	<u>2,377,250</u>	<u>37,184</u>	<u>1,142,113</u>
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	<u>\$ 161,089</u>	<u>\$ 4,587,817</u>	<u>\$ 79,295</u>	<u>\$ 2,377,250</u>

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

(Concluded)

# ALCHIP TECHNOLOGIES, LIMITED AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019

(In Thousands of U.S. Dollars and New Taiwan Dollars, Unless Stated Otherwise)

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### 1. GENERAL INFORMATION

Alchip Technologies, Limited (the Company) was incorporated in the Cayman Islands on February 27, 2003. The Company is mainly engaged in the research and development, design, and manufacture of fabless application specific integrated circuits (ASIC) and system on a chip (SOC) and the rendering of related services.

The Company's shares have been listed on the Taiwan Stock Exchange (TWSE) since October 28, 2014.

### 2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements of the Company and its subsidiaries (collectively referred to as the Group) were approved by the Group's board of directors on March 56, 2021.

### 3. APPLICATION OF NEW AND REVISED STANDARDS, AMENDMENTS AND INTERPRETATIONS

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

New IFRSs	Effective Date Announced by IASB (Note 1)
"Annual Improvements to IFRS Standards 2018-2020"	January 1, 2022 (Note 2)
Amendments to IFRS 3 "Reference to the Conceptual Framework"	January 1, 2022 (Note 3)
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, 2023
Amendments to IFRS 17	January 1, 2023
Amendments to IAS 1 "Classification of Liabilities as Current or Non-current"	January 1, 2023
Amendments to IAS 1 "Disclosure of Accounting Policies"	January 1, 2023 (Note 6)
Amendments to IAS 8 "Definition of Accounting Estimate"	January 1, 2023 (Note 7)
Amendments to IAS 16 "Property, Plant and Equipment - Proceeds before Intended Use"	January 1, 2022 (Note 4)
Amendments to IAS 37 "Onerous Contracts - Cost of Fulfilling a Contract"	January 1, 2022 (Note 5)

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

- Note 2: The amendments to IFRS 9 will be applied prospectively to modifications and exchanges of financial liabilities that occur on or after the annual reporting periods beginning on or after January 1, 2022. The amendments to IAS 41 “Agriculture” will be applied prospectively to the fair value measurements on or after the annual reporting periods beginning on or after January 1, 2022. The amendments to IFRS 1 “First-time Adoptions of IFRSs” will be applied retrospectively for annual reporting periods beginning on or after January 1, 2022.
- Note 3: The amendments are applicable 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, 2022.
- Note 4: The amendments are applicable to property, plant and equipment that are brought to the location and condition necessary for them to be capable of operating in the manner intended by management on or after January 1, 2021.
- Note 5: The amendments are applicable to contracts for which the entity has not yet fulfilled all its obligations on January 1, 2022.
- Note 6: The amendments are applicable to annual reporting periods beginning on or after January 1, 2023.
- Note 7: The amendments are applicable to changes of accounting estimate and accounting policies for annual reporting periods beginning on or after January 1, 2023.

#### **4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICY**

##### **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.

##### **Basis of Preparation**

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

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

- a. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;
- b. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices); and
- c. Level 3 inputs are unobservable inputs for the asset or liability.

##### **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). Adjustments have been made to the financial statements of subsidiaries to bring their accounting policies to be consistent with those used by the Group. All intercompany transactions, balance, income and expenses are eliminated in full upon consolidation. For subsidiaries’ details, percentage of ownership, and main businesses and products, see Note 12, Table 5 and Table 6 to the consolidated financial statements.

## **Foreign Currencies**

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

At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Exchange differences on monetary items arising from settlement or translation are recognized in profit or loss 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 on 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 to which gains and losses are recognized directly in other comprehensive income, in which case, 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 purposes of presenting consolidated financial statements, the assets and liabilities of the Group's foreign operations are translated into New Taiwan dollars using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period. The resulting currency translation differences are recognized in other comprehensive income. The exchange differences accumulated in equity which resulted from the translation of the assets and liabilities of the Group entities into the presentation currency are not subsequently reclassified to profit or loss.

## **Inventories**

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

## **Property, Plant and Equipment**

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

Depreciation is recognized based on the straight-line method. Each significant part is depreciated separately. The Group reviews the estimated useful lives, residual values, and depreciation method at the end of each reporting period, with the effect of any changes in estimates accounted for on a prospective basis.

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

## **Intangible Assets**

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

On derecognition of an intangible asset, the difference between the net disposal proceeds and the carrying

amount of the asset is recognized in profit or loss.

### **Impairment of Property, Plant and Equipment, Right-of-Use Assets and Intangible Assets**

At the end of each reporting period, the Group reviews the carrying amounts of its property, plant and equipment, right-of-use assets and intangible assets 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 for which a reasonable and consistent allocation basis.

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

### **Financial Instruments**

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

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

#### Financial assets

All regular way purchases or sales of financial assets made in the regular method are recognized and derecognized on a trade date basis.

Financial assets are classified into the following categories: Financial assets at amortized cost and investments in debt instruments at FVTOCI.

#### 1. Financial assets at amortized cost

Financial assets that satisfy the following two conditions are measured at amortized cost:

- a) Financial assets are held within a business model whose objective is to collect contractual cash flows; and
- b) The contractual terms of financial assets give rise on specified dates that cash flows are solely payments of principal and interest on principal outstanding.

Subsequent to the initial recognition, financial assets at the amortized cost (including cash and cash equivalents, accounts receivable, other receivable, and pledged time deposits) are measured at amortized cost, which equals gross carrying amount determined using the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

Cash equivalents include time deposits with original maturities within three months from the date of acquisition, which are high 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.

## 2. Investments in debt instruments at FVTOCI

Investments in debt instruments that satisfy the following two conditions are measured at FVTOCI:

- a) Financial assets are held within a business model whose objective is to collect contractual cash flows and sell financial assets; and
- b) The contractual terms of financial assets give rise on specified dates that cash flows are solely payments of principal and interest on principal outstanding.

Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment gains or losses on investments in debt instruments at FVTOCI are recognized in profit or loss. Other changes in the carrying amount of these debt instruments are recognized in other comprehensive income and will be reclassified to profit or loss when these debt instruments are disposed of.

## 3. Investments in equity instruments at FVTOCI

On initial recognition, the Group may irrevocably designate investments in equity investments that is not held for trading and non-contingent consideration of mergers and acquisitions as at FVTOCI.

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in other equity. Disposal of the investments, the accumulated gains and losses transfer to retained earnings, not reclassify to profits and losses

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

### Impairment of financial assets

The Group recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including accounts receivable) and investments in debt instruments measured at FVTOCI at the end of each reporting period.

The loss allowance for accounts receivable is measured at lifetime expected credit loss. For other financial assets, the Group recognizes lifetime expected credit losses when there have been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on the financial assets have not increased significantly since initial recognition, the Group measures the loss allowance of the financial assets at an amount equal to 12-month expected credit losses.

Expected credit losses reflect the weighted average of credit loss with the respective risks of default occurring. Lifetime expected credit losses 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 expected credit losses represent the portion of lifetime expected credit losses 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 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 the other comprehensive income and does not reduce the carrying amount of the financial assets.

## **Revenue Recognition**

The Group identifies the contract performance obligations and recognizes revenue when all of the contract performance obligations are satisfied.

### **a. Revenue from sales of goods**

Revenue from sale of goods is generated from sale of integrated circuit products. The Group recognizes revenue and accounts receivable when performance obligation is satisfied and promised goods are shipped or delivered to the customer's specified location depending on commercial terms, where customer obtains control of goods.

### **b. Revenue from non-recurring engineering (NRE) service**

The Group provides NRE service which does not create an asset with alternative use, and the Group has an enforceable right to payment for the performance completed to date. Revenue is recognized based on the completion of the contract by the output method and milestone achieved.

## **Leases**

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

### **a. The Group as the lessor**

Lease income from operating leases is recognized on a straight-line basis over the lease term.

### **b. The Group as the 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 basis over the lease terms.

Right-of-use assets are initially measured at cost, which comprises the initial measurement of lease liabilities. 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, which comprise fixed 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 its 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, or a change in future lease payments resulting from a change in a rate used to determine those payments, 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.

### **Government Grants**

Government grants are recognized when there is a reasonable assurance that the Group is able to 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 are recognized in profit or loss in the period in which they become receivable for the purpose of giving immediate financial support to The Group with no future related cost. Government grants whose primary condition is for The Group to purchase, construct or otherwise acquire noncurrent assets are recognized as deferred revenue, and transferred to profit and loss on a systematic and rational basis over the useful lives of related assets.

### **Employee Benefits**

#### **a. Short-term employee benefits**

Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

#### **b. Post-employment benefits**

Payments to defined contribution retirement benefit plans are recognized as an expense when employees have rendered service entitling them to the contributions.

### **Share-based Payment Arrangements**

The fair value at the grant date of the employee share options 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 capital surplus - employee share options. It is recognized as an expense in full at the grant date if vesting immediately.

At the end of each reporting period, the Group revises its estimate of the number of employee share options 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 the capital surplus - employee share options.

### **Taxation**

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

#### **a. Current tax**

The Company and its subsidiaries accrue income tax payables (receivables) based on current incomes (losses) at the applicable statutory rates in accordance with the jurisdictions where the Company and its subsidiaries are located.

According to the Income Tax Act of the Republic of China, an additional tax at unappropriated earnings is provided for as income tax in the year the shareholders approve to retain earnings.

Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.



b. Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities and the corresponding tax bases used in the computation of taxable profit.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences, unused loss carry forward, and unused tax credits to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

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 period in which the liabilities are settled or the assets are realized, based on tax rates and tax laws that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which The Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

c. Current and deferred tax

Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognized in other comprehensive income or directly in equity respectively.

## 5. CRITICAL ACCOUNTING JUDGEMENTS 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 revisions affect only that period or in the period of the revisions and future periods if the revisions affect both current and future periods.

### **Impairment of Equipment and Intangible Assets**

The impairment of equipment and intangible assets in relation to the design and production of integrated circuits is based on the recoverable amount of those assets, which is the higher of fair value less costs to sell or value-in-use of those assets. Any changes in the life cycle, future production volumes and market price of integrated circuits will affect the recoverable amount of those assets and may lead to a recognition of additional or a reversal of impairment losses.

### **Impairment of Inventories**

The net realizable value of inventory represents the estimated selling price of inventories less all estimated costs of completion and costs necessary to make the sale. The estimation is determined based on market conditions and historical selling records of similar products, and the changes of market conditions may have significant effects on the net realizable value estimation.

## 6. CASH AND CASH EQUIVALENTS

	<b>December 31</b>	
	<b>2020</b>	<b>2019</b>
<u>NT\$</u>		
Demand deposits	\$ 4,582,114	\$ 2,365,883
Checking accounts	5,301	10,985
Petty cash	<u>402</u>	<u>382</u>
	<u>\$ 4,587,817</u>	<u>\$ 2,377,250</u>
<u>US\$</u>		
Demand deposits	\$ 160,889	\$ 78,915
Checking accounts	186	366
Petty cash	<u>14</u>	<u>14</u>
	<u>\$ 161,089</u>	<u>\$ 79,295</u>

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

	<b>December 31</b>	
	<b>2020</b>	<b>2019</b>
Bank balance	0.01%-0.35%	0.01%-1.90%

## 7. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME (FVTOCI)

	<b>December 31</b>	
	<b>2020</b>	<b>2019</b>
<u>Current</u>		
<u>NT\$</u>		
Foreign bonds investments	<u>\$ 33,084</u>	<u>\$ 103,208</u>
<u>US\$</u>		
Foreign bonds investments	<u>\$ 1,162</u>	<u>\$ 3,443</u>
<u>Non-current</u>		
<u>NT\$</u>		
Foreign bonds investments	\$199,803	\$354,372
Foreign equity investments	<u>120,680</u>	<u>-</u>
	<u>\$320,483</u>	<u>\$354,372</u>
<u>US\$</u>		
Foreign bonds investments	\$ 7,016	\$ 11,820
Foreign equity investments	<u>4,237</u>	<u>-</u>
	<u>\$ 11,253</u>	<u>\$ 11,820</u>

The Group invested RMB27,707 thousands in KQ (Shenzhen) Semiconductor & Technology Industry Equity Investment Fund on December, 2020. The investment was designated as atFVTOCI due to its long term strategic investment purpose and resulted in the increase of NT\$120,680 thousand (US\$4,237 thousand) on foreign equity investment.

Refer to Note 9 for information on credit risk management and impairment assessment related to debt instruments at FVTOCI.

## 8. FINANCIAL ASSETS AT AMORTIZED COST

	<b>December 31</b>	
	<b>2020</b>	<b>2019</b>
<u>Current</u>		
<u>NT\$</u>		
Time deposits with original maturities exceeding three months from the date of acquisition	<u>\$ 427,200</u>	<u>\$ -</u>
 <u>Current</u>		
<u>US\$</u>		
Time deposits with original maturities exceeding three months from the date of acquisition	<u>\$ 15,000</u>	<u>\$ -</u>

Refer to Note 9 for information on credit risk management and impairment loss assessment related to financial assets at amortized cost.

## 9. CREDIT RISK MANAGEMENT OF DEBT INSTRUMENTS

The investments in debt instrument were classified as at FVTOCI and financial assets as at amortized cost.

For the year ended December 31, 2020

	<u>Financial Assets at FVTOCI</u>		<u>Financial Assets at Amortized Cost</u>	
	NT\$	US\$	NT\$	US\$
Total Carrying Amount	\$ 279,534	\$ 9,816	\$ 427,200	\$ 15,000
Loss Allowance	<u>(66,068)</u>	<u>(2,320)</u>	<u>-</u>	<u>-</u>
Amortized Cost	213,466	7,496	<u>\$ 427,200</u>	<u>\$ 15,000</u>
Fair Value Adjustment	<u>19,421</u>	<u>682</u>		
	<u>\$ 232,887</u>	<u>\$ 8,178</u>		

For the year ended December 31, 2019

	<u>Financial Assets at FVTOCI</u>		<u>Financial Assets at Amortized Cost</u>	
	NT\$	US\$	NT\$	US\$
Total Carrying Amount	\$ 484,330	\$ 16,155	\$ -	\$ -
Loss Allowance	<u>(56,603)</u>	<u>(1,888)</u>	<u>-</u>	<u>-</u>
Amortized Cost	427,727	14,267	<u>\$ -</u>	<u>\$ -</u>
Fair Value Adjustment	<u>(29,853)</u>	<u>996</u>		
	<u>\$ 457,580</u>	<u>\$ 15,263</u>		

The credit rating information is supplied by an independent credit rating agency (CRA) in order to continuously track and supervise the credit risk change of the investments in debt instruments. At the same time, the Group reviews the information such as bond yield rate curve and debtors' information announced to assess whether the credit risk of investment in debt instruments has significantly increased since the initial recognition.

The Group considers the historical default rate each level provided by CRA, the current financial position, and its business outlook in order to measure the 12-month expected credit loss (ECL) or lifetime ECL of the debt instruments. The current credit risk rating mechanism used by the Group is as follows:

<b>Credit Rating</b>	<b>Definition</b>	<b>Basis for Recognizing ECLs</b>
Performing	The credit risk of debtor is low, and it has sufficient ability to repay the contractual cash flow, i.e., the Moody's rating is above Level B.	12-month ECL
Doubtful	The credit risk has significantly increased since the initial recognition, i.e., the Moody's rating has moved from above Level B to below Level B.	Lifetime ECL - not credit impaired
In default	There is evidence indicating the assets in credit impaired.	Lifetime ECL - credit impaired
Write-off	There is evidence indicating that the debtor is under severe financial difficulty and repayment cannot be reasonably expected.	Write-off

For the year ended December 31, 2020

Credit Rating	ECL Rate	Total Carrying Amount			
		Financial Assets at FVTOCI		Financial Assets at Amortized Cost	
		NT\$	US\$	NT\$	US\$
Performing	0%-2.04%	\$ 209,423	\$ 7,354	\$ 427,200	\$ 15,000
Doubtful	5.93%	5,665	199	-	-
In default	100%	64,446	2,263	-	-
Write-off	-	-	-	-	-

For the year ended December 31, 2019

Credit Rating	ECL Rate	Total Carrying Amount	
		Financial Assets at FVTOCI	
		NT\$	US\$
Performing	0.1%-2.06%	\$ 430,313	\$ 14,353
Doubtful	-	-	-
In default	100%	54,017	1,802
Write-off	-	-	-

Regarding the investments in debt instruments measured by FVTOCI and amortized cost, the loss allowance change information based on the credit risk rating is summarized as follows:

	Credit Rating		
	Performing (12-month ECLs)	Doubtful (Lifetime ECLs - Not Credit- impaired)	In default (Lifetime ECLs - Credit- impaired)
<u>NT\$</u>			
Balance on January 1, 2020	\$ 2,586	\$ -	\$ 54,017
Transfers			
From performing to doubtful (a)	(411)	12,343	-
From doubtful to in default (a)	-	(12,168)	13,625
Derecognition	(544)	-	-
Risk Index Change	(395)	-	-
Exchange Rate and Other Changes	41	170	(3,196)
Balance on December 31, 2020	<u>\$ 1,277</u>	<u>\$ 345</u>	<u>\$ 64,446</u>
<u>NT\$</u>			
Balance on January 1, 2019	\$ 3,348	\$ -	\$ 46,741
Purchase of New Debt Instrument	1,379	-	-
Derecognition	(171)	-	-
Risk Index Change(b)	-	-	8,632
Exchange Rate and Other Changes	(1,970)	-	(1,356)
Balance on December 31, 2019	<u>\$ 2,586</u>	<u>\$ -</u>	<u>\$ 54,017</u>
<u>US\$</u>			
Balance on January 1, 2020	\$ 86	\$ -	\$ 1,802
Transfers			
From performing to doubtful (a)	(14)	417	-
From doubtful to in default (a)	-	(405)	461
Derecognition	(18)	-	-
Risk Index Change	(13)	-	-
Exchange Rate and Other Changes	4	-	-
Balance on December 31, 2020	<u>\$ 45</u>	<u>\$ 12</u>	<u>\$ 2,263</u>
<u>US\$</u>			
Balance on January 1, 2019	\$ 109	\$ -	\$ 1,522
Purchase of New Debt Instrument	45	-	-
Derecognition	(6)	-	-
Risk Index Change(b)	-	-	280
Exchange Rate and Other Changes	(62)	-	-
Balance on December 31, 2019	<u>\$ 86</u>	<u>\$ -</u>	<u>\$ 1,802</u>

- a. The rating of the bonds issued by Virgin Australia Holdings Ltd. fell below Level B in the second quarter of 2020, and the issuing company also announced debt restructuring; hence, the Group changed its credit rating from performing to doubtful. As a result, the allowance for impairment loss for doubtful credit rating increased by \$12,168 thousand (US\$405 thousand). Due to CRA stopped - providing credit rating information of Virgin Australia Holdings Ltd. and the issuing company suspended the interest payments in the fourth quarter of 2020, the Group changed its credit rating from doubtful to in default. As a result the allowance for impairment loss for in default credit rating increased by \$13,625 thousand (US\$461 thousand).
- b. For bonds issued by China Energy Reserve and Chemicals Group International Holding Limited, interest payments have been suspended since the first quarter of 2019 due to changes in the interest repayment plan; hence, the Group increased its ELC rate. As a result, the allowance for impairment loss for in default credit rating increased by \$8,632 thousand (US\$280 thousand) as a result.

## 10. ACCOUNTS RECEIVABLE

	<u>December 31</u>	
	<b>2020</b>	<b>2019</b>
<u>NT\$</u>		
At amortized cost accounts receivable		
Gross carrying amount	\$ 620,815	\$ 938,391
Less: Allowance for impairment loss	<u>(39,831)</u>	<u>(40,276)</u>
	<u>\$580,984</u>	<u>\$ 898,115</u>
<u>US\$</u>		
At amortized cost accounts receivable		
Gross carrying amount	\$ 21,798	\$ 31,300
Less: Allowance for impairment loss	<u>(1,398)</u>	<u>(1,343)</u>
	<u>\$ 20,400</u>	<u>\$ 29,957</u>

The payment term granted to customers is from 7 days to 90 days. The Group grants credit periods based on customers' financial conditions and historical payment records. In addition, when necessary, customers are requested to make prepayments in order to reduce the risk of financial loss due to delay of payment.

The Group measures the allowance for accounts receivable by lifetime ELCs. The lifetime ELCs are estimated using a provision matrix prepared by reference to the past default records of the debtors and an analysis of each debtor's current financial position, adjusted for factors that are specific to the debtors and an assessment of all the gross domestic product growth rates, unemployment rates and industrial indicators at the reporting date. The Group determines expected credit loss ratios by the factors including payment terms, jurisdiction of customers and the status of public listing or nonpublic listing.

When there is an information indicating that the customer is in severe financial difficulty and the Group cannot reasonably estimate the recoverable amounts, the Group writes off accounts receivable. However, 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 aging analysis for accounts receivable is as follows:

	<u>December 31</u>	
	<b>2020</b>	<b>2019</b>
<u>NT\$</u>		
0-60 days	\$582,652	\$ 649,064
61-120 days	-	188,514
More than and including 121 days	<u>38,163</u>	<u>100,813</u>
	<u>\$620,815</u>	<u>\$938,391</u>
<u>US\$</u>		
0-60 days	\$ 20,458	\$ 21,650
61-120 days	-	6,288
More than and including 121 days	<u>1,340</u>	<u>3,362</u>
	<u>\$ 21,798</u>	<u>\$ 31,300</u>

The movements of the loss allowance for accounts receivable was as follows:

	<b>For the Year Ended December 31</b>	
	<b>2020</b>	<b>2019</b>
<u>NT\$</u>		
Balance at January 1	\$ 40,276	\$ 5,606
Less: Credit impairment losses	1,629	35,887
Foreign Exchange Gains and Losses	<u>(2,074)</u>	<u>(1,217)</u>
Balance at December 31	<u>\$ 39,831</u>	<u>\$ 40,276</u>
<u>US\$</u>		
Balance at January 1	\$ 1,343	\$ 182
Less: Credit impairment losses	<u>55</u>	<u>1,161</u>
Balance at December 31	<u>\$ 1,398</u>	<u>\$ 1,343</u>

## 11. INVENTORIES

	<b>December 31</b>	
	<b>2020</b>	<b>2019</b>
<u>NT\$</u>		
Finished products	\$ 49,447	\$ 91,077
Work in progress	896,281	482,923
Raw materials	<u>2,046</u>	<u>7,577</u>
	<u>\$947,774</u>	<u>\$581,577</u>
<u>US\$</u>		
Finished products	\$ 1,736	\$ 3,038
Work in progress	31,471	16,108
Raw materials	<u>72</u>	<u>253</u>
	<u>\$ 33,279</u>	<u>\$ 19,399</u>

The cost of integrated circuit recognized as cost of goods sold for the years ended December 31, 2020 and 2019 were NT\$3,840,160 thousand (US\$129,959 thousand) and NT\$1,967,680 thousand (US\$63,654 thousand), respectively.

The cost of goods sold included reversals of inventory write-downs of NT\$44,661 thousand (US\$1,511 thousand) and inventory write-downs of NT\$15,556 thousand (US\$503 thousand) for the years ended December 31, 2020 and 2019.

## 12. SUBSIDIARIES

### a. Subsidiaries included in the consolidated financial statements

Investor	Subsidiary	Nature of Business	Percentage of Ownership (%)		Description
			September 30, 2020	December 31, 2019	
The Company	Alchip Technologies, Limited (registered in Hong Kong) (referred to as "Alchip HK")	Investments	100	100	
	AlChip Technologies, Inc. (registered in the U.S.A.) (referred to as "Alchip USA")	Sales of ASIC and SOC.	100	100	
	Alchip Technologies, KK (registered in Japan) (referred to as "Alchip KK")	Sales of ASIC and SOC.	100	100	
	Alchip Technologies, Inc. (registered in Taiwan)	Provide ASIC and SOC services.	100	100	
	Alchip Investment, Inc. (registered in the British Virgin Islands) (referred to as "Alchip BVI")	Investments	100	100	
Alchip HK	Alchip Technologies (Shanghai) (registered in China) (referred to as "Alchip Shanghai")	Research and development, design, and sales of ASIC and SOC and rendering of related services.	100	100	
	Alchip Technologies (Wuxi) (registered in China) (referred to as "Alchip Wuxi")	Research and development and design of ASIC and SOC and rendering of related services.	100	100	
	Alchip Technologies (Hefei) (registered in China) (referred to as "Alchip Hefei")	Research and development and design of ASIC and SOC and rendering of related services.	100	100	
	Alchip Technologies Jinan (registered in China) (referred to as "Alchip Jinan")	Research and development and design of ASIC and SOC and rendering of related services.	100	100	
	Alchip Technologies (Guangzhou) (registered in China) (referred to as "Alchip Guangzhou")	Research and development, design, and sales of ASIC and SOC and rendering of related services.	100	-	Note

Note: Established in June 2020.

### b. Subsidiaries excluded from the consolidated financial statements: None.

## 13. PROPERTY, PLANTS AND EQUIPMENT

	Machinery Equipment	Computer Equipment	Office Equipment	Leasehold Improvements	Transportation Equipment	Total
<u>NT\$</u>						
<u>Cost</u>						
Balance, January 1, 2019	\$ 2,411,733	\$ 142,144	\$ 17,799	\$ 36,734	\$ 6,975	\$ 2,615,385
Addition	521,336	12,940	674	-	-	534,950
Disposals	-	(1,342)	(288)	-	-	(1,630)
Effect of foreign currency exchange differences	<u>(73,430)</u>	<u>(3,615)</u>	<u>(365)</u>	<u>(879)</u>	<u>(167)</u>	<u>(78,456)</u>
Balance, December 31, 2019	<u>\$ 2,859,639</u>	<u>\$ 150,127</u>	<u>\$ 17,820</u>	<u>\$ 35,855</u>	<u>\$ 6,808</u>	<u>\$ 3,070,249</u>
<u>Accumulated depreciation</u>						
Balance, January 1, 2019	\$(2,170,102)	\$ (96,600)	\$ (9,498)	\$ (19,746)	\$ (2,603)	\$ (2,298,549)
Depreciation expenses	(423,885)	(16,101)	(2,557)	(8,526)	(1,178)	(452,247)
Disposals	-	1,280	254	-	-	1,534
Effect of foreign currency exchange differences	<u>64,710</u>	<u>2,626</u>	<u>272</u>	<u>729</u>	<u>98</u>	<u>68,435</u>
Balance, December 31, 2019	<u>\$(2,529,277)</u>	<u>\$(108,795)</u>	<u>\$(11,529)</u>	<u>\$(27,543)</u>	<u>\$(3,683)</u>	<u>\$(2,680,827)</u>
Carrying amounts at December 31, 2019	<u>\$ 330,362</u>	<u>\$ 41,332</u>	<u>\$ 6,291</u>	<u>\$ 8,312</u>	<u>\$ 3,125</u>	<u>\$ 389,422</u>
<u>Cost</u>						
Balance, January 1, 2020	\$ 2,859,639	\$ 150,127	\$ 17,820	\$ 35,855	\$ 6,808	\$ 3,070,249
Addition	1,124,641	135,838	400	5,844	-	1,266,723
Disposals	(3,469)	(19,975)	-	-	-	(23,444)
Effect of foreign currency exchange differences	<u>(183,637)</u>	<u>(11,266)</u>	<u>(668)</u>	<u>(2,005)</u>	<u>(341)</u>	<u>(197,917)</u>
Balance, December 31, 2020	<u>\$ 3,797,174</u>	<u>\$ 254,724</u>	<u>\$ 17,552</u>	<u>\$ 39,694</u>	<u>\$ 6,467</u>	<u>\$ 4,115,611</u>



	<b>Machinery Equipment</b>	<b>Computer Equipment</b>	<b>Office Equipment</b>	<b>Leasehold Improvements</b>	<b>Transportation Equipment</b>	<b>Total</b>
<u>NT\$</u>						
<u>Accumulated depreciation</u>						
Balance, January 1, 2020	\$(2,529,277)	\$(108,795)	\$(11,529)	\$(27,543)	\$ (3,683)	\$ (2,680,827)
Depreciation expenses	(767,599)	(27,129)	(1,633)	(6,473)	(962)	(803,796)
Disposals	3,469	18,204	-	-	-	21,673
Effect of foreign currency exchange differences	<u>154,193</u>	<u>5,340</u>	<u>524</u>	<u>1,612</u>	<u>219</u>	<u>161,888</u>
Balance, December 31, 2020	<u>\$ (3,139,214)</u>	<u>\$ (112,380)</u>	<u>\$ (12,638)</u>	<u>\$ (32,404)</u>	<u>\$ (4,426)</u>	<u>\$ (3,301,062)</u>
Carrying amounts at						
December 31, 2020	<u>\$ 657,960</u>	<u>\$ 142,344</u>	<u>\$ 4,914</u>	<u>\$ 7,290</u>	<u>\$ 2,041</u>	<u>\$ 814,549</u>
<u>US\$</u>						
<u>Cost</u>						
Balance, January 1, 2019	\$ 78,520	\$ 4,627	\$ 579	\$ 1,196	\$ 227	\$ 85,149
Addition	16,865	419	22	-	-	17,306
Disposals	-	(43)	(9)	-	-	(52)
Effect of foreign currency exchange differences	<u>-</u>	<u>3</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>5</u>
Balance, December 31, 2019	<u>\$ 95,385</u>	<u>\$ 5,006</u>	<u>\$ 594</u>	<u>\$ 1,196</u>	<u>\$ 227</u>	<u>\$ 102,408</u>
<u>Accumulated depreciation</u>						
Balance, January 1, 2019	\$ (70,652)	\$ (3,145)	\$ (309)	\$ (643)	\$ (85)	\$ (74,834)
Depreciation expenses	(13,712)	(521)	(83)	(276)	(38)	(14,630)
Disposals	-	41	8	-	-	49
Effect of foreign currency exchange differences	<u>1</u>	<u>(4)</u>	<u>(1)</u>	<u>-</u>	<u>-</u>	<u>(4)</u>
Balance, December 31, 2019	<u>\$ (84,363)</u>	<u>\$ (3,629)</u>	<u>\$ (385)</u>	<u>\$ (919)</u>	<u>\$ (123)</u>	<u>\$ (89,419)</u>
Carrying amounts at						
December 31, 2019	<u>\$ 11,022</u>	<u>\$ 1,377</u>	<u>\$ 209</u>	<u>\$ 277</u>	<u>\$ 104</u>	<u>\$ 12,989</u>
<u>Cost</u>						
Balance, January 1, 2020	\$ 95,385	\$ 5,006	\$ 594	\$ 1,196	\$ 227	\$ 102,408
Addition	38,060	4,597	14	198	-	42,869
Disposals	(117)	(676)	-	-	-	(793)
Effect of foreign currency exchange differences	<u>-</u>	<u>17</u>	<u>8</u>	<u>-</u>	<u>-</u>	<u>25</u>
Balance, December 31, 2020	<u>\$ 133,328</u>	<u>\$ 8,944</u>	<u>\$ 616</u>	<u>\$ 1,394</u>	<u>\$ 227</u>	<u>\$ 144,509</u>
<u>Accumulated depreciation</u>						
Balance, January 1, 2020	\$ (84,363)	\$ (3,629)	\$ (385)	\$ (919)	\$ (123)	\$ (89,419)
Depreciation expenses	(25,977)	(918)	(55)	(219)	(33)	(27,202)
Disposals	117	616	-	-	-	733
Effect of foreign currency exchange differences	<u>(2)</u>	<u>(15)</u>	<u>(4)</u>	<u>-</u>	<u>1</u>	<u>(20)</u>
Balance, December 31, 2020	<u>\$ (110,225)</u>	<u>\$ (3,946)</u>	<u>\$ (444)</u>	<u>\$ (1,138)</u>	<u>\$ (155)</u>	<u>\$ (115,908)</u>
Carrying amounts at						
December 31, 2020	<u>\$ 23,103</u>	<u>\$ 4,998</u>	<u>\$ 172</u>	<u>\$ 256</u>	<u>\$ 72</u>	<u>\$ 28,601</u>

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

Machinery equipment	1-5 years
Computer equipment	3-5 years
Office equipment	3-5 years
Leasehold improvements	1-5 years
Transportation equipment	5 years

## 14. LEASE ARRANGEMENTS

### a. Right-of-use assets

	<b>December 31</b>			
	<b>2020</b>		<b>2019</b>	
	NT\$	US\$	NT\$	US\$
Carrying amount				
Buildings	\$ 107,554	\$ 3,776	\$ 109,923	\$ 3,667
Transportation equipment	<u>-</u>	<u>-</u>	<u>162</u>	<u>5</u>
	<u>\$ 107,554</u>	<u>\$ 3,776</u>	<u>\$ 110,085</u>	<u>\$ 3,672</u>
	<b>For the year ended December 31</b>			
	<b>2020</b>		<b>2019</b>	
	NT\$	US\$	NT\$	US\$
Additions to right-of-use assets	<u>\$ 46,356</u>	<u>\$ 1,569</u>	<u>\$ 9,775</u>	<u>\$ 316</u>
Depreciation charge for right-of-use assets				
Buildings	\$ 40,256	\$ 1,362	\$ 37,365	\$ 1,209
Transportation equipment	<u>159</u>	<u>6</u>	<u>167</u>	<u>5</u>
	<u>\$ 40,415</u>	<u>\$ 1,368</u>	<u>\$ 37,532</u>	<u>\$ 1,214</u>

In addition to the aforementioned additions and recognized depreciation expenses, the Group did not have significant sublease or impairment of right-of-use assets during the year ended December 31, 2020 and 2019.

### b. Lease liabilities

	<b>December 31</b>			
	<b>2020</b>		<b>2019</b>	
	NT\$	US\$	NT\$	US\$
Carrying amount				
Current	<u>\$ 41,914</u>	<u>\$ 1,472</u>	<u>\$ 37,692</u>	<u>\$ 1,257</u>
Non-current	<u>\$ 71,904</u>	<u>\$ 2,525</u>	<u>\$ 73,689</u>	<u>\$ 2,458</u>

Lease liabilities discount rate:

	<b>December 31</b>	
	<b>2020</b>	<b>2019</b>
Buildings	0.98%-5.50%	0.98%-5.50%
Transportation equipment	-	3.00%

c. Material lease-in activities and terms

The Group leases buildings for office use with lease terms of 2 to 10 years. The Group does not have purchase options to acquire the buildings at the end of the lease terms.

d. Other lease information

	<b>December 31</b>			
	<b>2020</b>		<b>2019</b>	
	NT\$	US\$	NT\$	US\$
Expenses relating to short-term leases	<u>\$ 13,007</u>	<u>\$ 440</u>	<u>\$ 11,254</u>	<u>\$ 364</u>
Expenses relating to variable lease payments not included in the measurement of lease liabilities	<u>\$ 62,969</u>	<u>\$ 2,131</u>	<u>\$ -</u>	<u>\$ -</u>
Total cash outflow for leases	<u>\$(121,943)</u>	<u>\$ (4,127)</u>	<u>\$(50,363)</u>	<u>\$ (1,629)</u>

**15. INTANGIBLE ASSETS**

	<b>Silicon Intellectual Property (SIP)</b>	<b>Software Cost</b>	<b>Total</b>
<u>NT\$</u>			
<u>Cost</u>			
Balance, January 1, 2019	\$959,152	\$ 14,806	\$ 973,958
Additions	513,864	5,845	519,709
Disposals	793	-	(793)
Effect of Foreign Currency Exchange Differences	<u>(38,421)</u>	<u>(531)</u>	<u>(38,952)</u>
Balance, December 31, 2019	<u>\$1,433,802</u>	<u>\$ 20,120</u>	<u>\$ 1,453,922</u>
<u>Accumulated amortization</u>			
Balance, January 1, 2019	\$(813,575)	\$ (13,624)	\$(827,199)
Amortization expense	(437,901)	(1,068)	(438,969)
Disposals	793	-	793
Effect of Foreign Currency Exchange Differences	<u>32,648</u>	<u>358</u>	<u>33,006</u>
Balance, December 31, 2019	<u>\$(1,218,035)</u>	<u>\$ (14,334)</u>	<u>\$ (1,232,369)</u>
Carrying amounts at December 31, 2019	<u>\$ 215,767</u>	<u>\$ 5,786</u>	<u>\$ 221,553</u>
<u>Cost</u>			
Balance, January 1, 2020	\$1,433,802	\$ 20,120	\$ 1,453,922
Additions	154,865	3,313	158,178
Disposals	-	-	-
Effect of Foreign Currency Exchange Differences	<u>(75,868)</u>	<u>(1,126)</u>	<u>(76,994)</u>
Balance, December 31, 2020	<u>\$1,512,799</u>	<u>\$ 22,307</u>	<u>\$ 1,535,106</u>

	<b>Silicon Intellectual Property (SIP)</b>	<b>Software Cost</b>	<b>Total</b>
<u>NT\$</u>			
<u>Accumulated amortization</u>			
Balance, January 1, 2020	\$ (1,218,035)	\$ (14,334)	\$ (1,232,369)
Amortization expense	(246,007)	(2,964)	(248,971)
Disposals	-	-	-
Effect of Foreign Currency Exchange Differences	<u>69,105</u>	<u>825</u>	<u>69,930</u>
Balance, December 31, 2020	<u>\$(1,394,937)</u>	<u>\$(16,473)</u>	<u>\$(1,411,410)</u>
Carrying amounts at December 31, 2020	<u>\$ 117,862</u>	<u>\$ 5,834</u>	<u>\$ 123,696</u>
<u>US\$</u>			
<u>Cost</u>			
Balance, January 1, 2019	\$ 31,229	\$ 481	\$ 31,710
Additions	16,624	189	16,813
Disposals	<u>(26)</u>	<u>-</u>	<u>(26)</u>
Balance, December 31, 2019	<u>\$ 47,827</u>	<u>\$ 670</u>	<u>\$ 48,497</u>
<u>Accumulated amortization</u>			
Balance, January 1, 2019	\$ (26,488)	\$ (444)	\$ (26,932)
Amortization expense	(14,166)	(35)	(14,201)
Disposals	<u>26</u>	<u>-</u>	<u>26</u>
Balance, December 31, 2019	<u>\$(40,628)</u>	<u>\$(479)</u>	<u>\$(41,107)</u>
Carrying amounts at December 31, 2019	<u>\$ 7,199</u>	<u>\$ 191</u>	<u>\$ 7,390</u>
<u>Cost</u>			
Balance, January 1, 2020	\$ 47,827	\$ 670	\$ 48,497
Additions	5,240	113	5,333
Disposals	-	-	-
Effect of Foreign Currency Exchange Differences	<u>51</u>	<u>-</u>	<u>51</u>
Balance, December 31, 2020	<u>\$ 53,118</u>	<u>\$ 783</u>	<u>\$ 53,901</u>
<u>Accumulated amortization</u>			
Balance, January 1, 2020	\$ (40,628)	\$ (479)	\$ (41,107)
Amortization expense	(8,327)	(99)	(8,426)
Disposals	-	-	-
Effect of Foreign Currency Exchange Differences	<u>(25)</u>	<u>-</u>	<u>(25)</u>
Balance, December 31, 2020	<u>\$(48,980)</u>	<u>\$(578)</u>	<u>\$(49,558)</u>
Carrying amounts at December 31, 2020	<u>\$ 4,138</u>	<u>\$ 205</u>	<u>\$ 4,343</u>

The above items of intangible assets were depreciated on a straight-line basis over the estimated useful lives as follows:

Silicon intellectual property (SIP)	1-2 years
Software cost	3-5 years

## 16. PREPAYMENTS

	<b>December 31</b>	
	<b>2020</b>	<b>2019</b>
<u>NT\$</u>		
Prepayment for raw materials	\$ 864,211	\$ 9,242
Prepayment for SIP	111,395	28,353
Prepayment for electronic design automation (EDA) tools	61,276	31,932
Others	<u>13,160</u>	<u>13,344</u>
	<u>\$1,050,042</u>	<u>\$ 82,871</u>

	<b>December 31</b>	
	<b>2020</b>	<b>2019</b>
<u>US\$</u>		
Prepayment for raw materials	\$ 30,344	\$ 308
Prepayment for SIP	3,912	946
Prepayment for electronic design automation (EDA) tools	2,152	1,065
Others	<u>461</u>	<u>445</u>
	<u>\$ 36,869</u>	<u>\$ 2,764</u>

## 17. SHORT TERM BORROWING

Loans were financed from Morgan Stanley Asia International Limited, Singapore Branch with Open Fed Fund+110bps borrowing rate (the interest rate range was 2.23% to 3.44% in the first half of 2020). In addition, the net assets (bonds minus borrowing amount) held by the Group in the Morgan Stanley account must be higher than the minimum guarantee. The Group has repaid the entire loan in May 2020.

## 18. OTHER PAYABLES

	<b>December 31</b>	
	<b>2020</b>	<b>2019</b>
<u>NT\$</u>		
Payable for salaries and bonuses	\$ 316,594	\$ 201,427
Payable for SIP	87,779	180,338
Payable for professional services	25,401	6,564
Payable for sales tax	23,507	110
Payable for technical services	18,983	20,688
Payable for purchase of equipment	9,283	23,845
Others	<u>33,229</u>	<u>41,925</u>
	<u>\$514,776</u>	<u>\$474,897</u>

	<b>December 31</b>	
<u>US\$</u>	<b>2020</b>	<b>2019</b>
Payable for salaries and bonuses	\$ 11,116	\$ 6,719
Payable for SIP	3,082	6,015
Payable for professional services	892	219
Payable for sales tax	825	4
Payable for technical services	667	690
Payable for purchase of equipment	326	795
Others	<u>1,167</u>	<u>1,398</u>
	<u>\$ 18,075</u>	<u>\$ 15,840</u>

## 19. EQUITY

### a. Share capital

#### Ordinary shares

	<b>December 31</b>	
	<b>2020</b>	<b>2019</b>
Number of shares authorized (in thousand)	<u>100,000</u>	<u>100,000</u>
Shares authorized (NT\$)	<u>\$ 1,000,000</u>	<u>\$ 1,000,000</u>
Number of shares issued and fully paid (in thousand)	<u>62,029</u>	<u>60,613</u>
Share amount issued		
NT\$	<u>\$ 620,285</u>	<u>\$ 606,129</u>
US\$	<u>\$ 19,512</u>	<u>\$ 19,034</u>

Fully paid ordinary shares, which have a par value of NT\$10, carry one vote per share and right to dividends. The change in share capital was mainly due to the execution of employee share option.

### b. Retained earnings and dividend policy

Under the dividend policy as set forth in the Articles of Incorporation, the Company's annual net income after tax shall offset its losses in previous years, then set aside a special reserve in accordance with the Applicable Public Company Rules of the Republic of China or as requested by the authorities in charge, 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 shall be resolved in the shareholders' meeting for distribution of dividends to shareholders. For the policy on the distribution of employees' compensation and directors' remuneration specified in the Articles of Incorporation, refer to Note 23-(6) Employees' Compensation and Directors' Remuneration.

The Company's Articles of Incorporation also stipulate a dividend policy that distribution of retained earnings may proceed by way of cash or share dividends, but the cash dividend to be distributed shall be no lower than 10% of the aggregate dividend distributed to shareholders and no more than 100% of the aggregate dividend distributed to shareholders.

The appropriation of earnings for 2019 and 2018 was approved through the resolution of the ordinary shareholders' meeting on June 11, 2020 and June 21, 2019.

	2019			
	Appropriation of Earnings (In Thousand)		Dividends Per Share (In Dollar)	
	US\$	NT\$	US\$	NT\$
Cash Dividends	\$ 7,216	\$ 214,111	\$ 0.119	\$ 3.504

	2018			
	Appropriation of Earnings (In Thousand)		Dividends Per Share (In Dollar)	
	US\$	NT\$	US\$	NT\$
Cash Dividends	\$ 2,915	\$ 90,685	\$ 0.049	\$ 1.516

The appropriation of earnings for 2020 was proposed by Company's board of directors on March 5, 2021.

	2020			
	Appropriation of Earnings (In Thousand)		Dividends Per Share (In Dollar)	
	US\$	NT\$	US\$	NT\$
Cash Dividends	<u>\$ 16,810</u>	<u>\$ 474,717</u>	\$ 0.241	\$ 6.8
Special Reserve	<u>\$ 4,749</u>	<u>\$ 134,265</u>		

The appropriation of earnings for 2020 are subject to the resolution of the shareholders' meeting to be held on June 11, 2021.

c. Special reserve

Pursuant to existing regulations issued by the FSC and the directive titled "Questions and Answers for Special Reserves Appropriated Following Adoption of IFRSs", the Company shall set aside or reverse from a special reserve.

The increase in retained earnings that resulted from initial adoption IFRSs was NT\$63,380 thousand (US\$3,221 thousand). Special reserve from cumulative translation adjustments at the initial adoption of IFRSs was NT\$67,693 thousand (around US\$2,799 thousand). As of December 31, 2020, the amounts of the special reserve remained unchanged.

## 20. SHARE-BASED PAYMENT ARRANGEMENTS

### Employee Share Option Plan of the Company and Subsidiaries

According to the Company's employee share option plan, each option entitles the holder to subscribe for 1,000 ordinary shares of the Company. The qualified employee includes employees of the Company and its subsidiaries satisfying specific requirements. The option granted are valid for 10 years and 50% becomes vested after two years from the grant date, and one-fourth vested annually for subsequent years.

Information on employee share options as follows:

Employee Share Option	2020		2019	
	Number of Options	Weighted-average Exercise Price (NT\$)	Number of Options	Weighted-average Exercise Price (NT\$)
Balance at January 1	6,205,391	\$ 77	5,963,413	\$ 66
Options granted	1,700,000	469	1,700,000	97
Options exercised	(1,415,531)	57	(839,834)	40
Options expired	<u>(79,100)</u>	106	<u>(618,188)</u>	64
Balance at December 31	<u>6,410,760</u>	185	<u>6,205,391</u>	77
Options exercisable, end of year	<u>1,925,185</u>	64	<u>1,763,391</u>	48
Weighted-average fair value of options granted (NT\$)	<u>\$248</u>		<u>\$50</u>	

The weighted-average exercise price in 2020 and 2019 are NT\$408 and NT\$128, respectively.

December 31			
2020		2019	
Exercise Price (NT\$)	Weighted-average Remaining Contractual Life (Years)	Exercise Price (NT\$)	Weighted-average Remaining Contractual Life (Years)
\$25.0	5.87	\$25.0	6.87
37.2	5.18	37.2	6.18
41.1	6.19	41.1	7.19
56.5	4.32	56.5	5.32
74.4	8.39	74.4	9.39
75.1	8.22	75.1	9.22
76.8	6.93	76.8	7.93
83.2	6.91	77.8	0.19
87.4	7.73	83.2	7.92
95.4	7.11	87.4	8.73
95.7	8.61	95.4	8.11
97.7	7.02	95.7	9.61
117.7	7.25	97.7	8.02
121.6	7.61	117.7	8.25
123.6	7.30	121.6	8.62
185.5	8.86	123.6	8.30
206.0	8.90	185.5	9.86
208.0	9.14	206.0	9.90
269.0	9.33		
340.5	9.46		
595.6	9.59		
588.0	9.96		



Options granted in 2020 and 2019 were priced by Black-Scholes pricing model and the inputs to the model on each grant-date were as follows:

	December 15,2020	July 31,2002	June 15,2020	April 28,2020	February 18,2020
Grant-date share price (NT\$)	588	599	342.5	269	208
Exercise price (NT\$)	588	599	342.5	269	208
Expected volatility	57.02%-57.15%	56.14%	55.26%	55.68%	54.57%
Expected life (years)	6-7	6-7	6-7	6-7	6-7
Expected dividend yield	-	-	-	-	-
Risk-free interest rate	0.22%-0.26%	0.38%-0.41%	0.42%-0.45%	0.45%-0.48%	0.55%-0.56%

	November 22, 2019	November 7, 2019	August 7, 2019	May 20, 2019	March 19, 2019
Grant-date share price (NT\$)	206	185.5	97.20	75.60	76.30
Exercise price (NT\$)	206	185.5	97.20	75.60	76.30
Expected volatility	54.05%	53.78%	53.45%	53.97%	54.35%
Expected life (years)	6-7	6-7	6-7	6-7	6-7
Expected dividend yield	-	-	-	-	-
Risk-free interest rate	0.62%-0.64%	0.62%-0.65%	0.60%-0.62%	0.63%-0.66%	0.69%-0.72%

Compensation costs recognized was NT\$79,498 thousand (US\$2,690 thousand) and NT\$52,884 thousand (US\$1,711 thousand) for the years ended December 31, 2020 and 2019, respectively.

## 21. GOVERNMENT GRANTS

The Company's subsidiary, Alchip Hefei, entered into a financial support agreement related to the "Advanced SOC Chip Design and Service Platform" with Economic Development Office of the Hefei High-tech Industrial Development Park (the "Merchant") in April 2017. The development period specified in the Agreement is from January 2017 to December 2018. As stipulated in the Agreement, the RMB10,000 thousand grant is paid in advance but the amount is subject to subsequent assessment. The grant shall be returned with interests if the Merchant deems that Alchip Hefei does not achieve the performance indicators set out in the Agreement. The performance indicators set out in the agreement are as follows:

### a. Investment projects

- 1) The amount invested in equipment shall amount to RMB20,000 thousand
- 2) The expenditure in R&D shall exceed RMB60,000 thousand during the development period.

### b. Innovation output

The cumulative number of patent applications shall not be less than 6 for the year ended December 31, 2018.

The grant amounting to NT\$30,780 thousand (US\$1,042 thousand) was recognized as other income for the year ended December 31, 2020 due to the Merchant having performed the assessment and confirmed the final grant at RMB7,140 thousand.

## 22. REVENUE

### a. Contract balance

The change in the contract liability balances was mainly due to the timing difference between the satisfaction of performance obligation and the customer's payment. The Group recognized NT\$674,748 thousand (US\$22,835 thousand) and NT\$232,865 thousand (US\$7,533 thousand) as revenue from the beginning balance of contract liability for the year ended of December 31, 2020 and 2019.

### b. Revenue from contracts with customers

Cash Dividends	2020		2019	
	US\$	NT\$	US\$	NT\$
<u>Product</u>				
ASIC and chip production	\$ 6,903,529	\$ 233,630	\$4,314,253	\$ 139,566
Non-Recurring Engineering	169,578	5,739	13,372	433
Others	<u>5,812</u>	<u>196</u>	<u>4,331</u>	<u>139</u>
	<u>\$ 7,078,919</u>	<u>\$ 239,565</u>	<u>\$ 4,331,956</u>	<u>\$ 140,138</u>
<u>Geography</u>				
China	\$4,563,634	\$ 154,443	\$ 2,611,565	\$ 84,484
Japan	1,041,424	35,244	758,097	24,524
United States	672,600	22,762	644,164	20,839
Europe	505,645	17,112	53,608	1,734
Taiwan	290,651	9,836	260,117	8,415
Others	<u>4,965</u>	<u>168</u>	<u>4,405</u>	<u>142</u>
	<u>\$ 7,078,919</u>	<u>\$ 239,565</u>	<u>\$ 4,331,956</u>	<u>\$ 140,138</u>
<u>Application Type</u>				
High Performance Computing	\$ 5,401,830	\$ 182,809	\$ 2,590,962	\$ 83,817
Niche Market	781,809	26,458	796,781	25,776
Communication	592,184	20,041	558,504	18,067
Consumer	<u>303,096</u>	<u>10,257</u>	<u>385,709</u>	<u>12,478</u>
	<u>\$ 7,078,919</u>	<u>\$ 239,565</u>	<u>\$ 4,331,956</u>	<u>\$ 140,138</u>
<u>Resolution</u>				
6- nanometer	\$ 24,821	\$ 840	\$ -	\$ -
7- nanometer	1,917,140	64,880	860,374	27,833
12- nanometer	697,416	23,602	315,520	10,207
16- nanometer	3,006,316	101,740	1,427,610	46,183
28- nanometer	964,274	32,633	1,253,914	40,564
40- nanometer	329,709	11,158	264,483	8,556
Above 55- nanometer	125,617	4,251	205,445	6,646
Others	<u>13,626</u>	<u>461</u>	<u>4,610</u>	<u>149</u>
	<u>\$ 7,078,919</u>	<u>\$ 239,565</u>	<u>\$ 4,331,956</u>	<u>\$ 140,138</u>

## 23. NET PROFIT (LOSS)

Net profit (loss) included the following items:

### a. Interest income

	<b>2020</b>	<b>2019</b>
<u>NT\$</u>		
Bank deposits	\$ 18,579	\$ 26,817
Investments in debt instruments at FVTOCI	13,154	23,067
Financial assets at amortized cost	1505	6,550
Others	<u>438</u>	<u>406</u>
	<u>\$33,676</u>	<u>\$ 56,840</u>
<u>US\$</u>		
Bank deposits	\$ 629	\$ 868
Investments in debt instruments at FVTOCI	445	746
Financial assets at amortized cost	51	212
Others	<u>15</u>	<u>14</u>
	<u>\$ 1,140</u>	<u>\$ 1,840</u>

### b. Other gains and losses

	<b>2020</b>	<b>2019</b>
<u>NT\$</u>		
Net foreign exchange gains (losses)	\$ (1,259)	\$ 2,479
Gain(losses) on disposal of financial assets		
Investment in debt instrument at FVTOCI	3,560	(271)
Gain(losses) on disposal of equipment	2,887	(90)
Others	<u>(739)</u>	<u>(88)</u>
	<u>\$ 4,449</u>	<u>\$ 2,030</u>
<u>US\$</u>		
Net foreign exchange gains (losses)	\$ (42)	\$ 81
Gain(losses) on disposal of financial assets		
Investment in debt instrument at FVTOCI	120	(9)
Gain(losses) on disposal of equipment	98	(3)
Others	<u>(25)</u>	<u>(3)</u>
	<u>\$ 151</u>	<u>\$ 66</u>

### c. Finance costs

	<b>2020</b>	<b>2019</b>
<u>NT\$</u>		
Interest on lease liabilities	\$ 3,702	\$ 4,118
Interest on short-term loan	<u>252</u>	<u>398</u>
	<u>\$ 3,954</u>	<u>\$ 4,516</u>
<u>US\$</u>		
Interest on lease liabilities	\$ 126	\$ 133
Interest on short-term loan	<u>8</u>	<u>13</u>
	<u>\$ 134</u>	<u>\$ 146</u>

d. Depreciation and amortization

	<b>2020</b>	<b>2019</b>
<u>NT\$</u>		
Property, plants, and equipment	\$ 803,796	\$ 452,247
Right-of-use asset	40,415	37,532
Intangible assets	<u>248,971</u>	<u>438,969</u>
	<u>\$1,093,182</u>	<u>\$ 928,748</u>
An analysis of depreciation by function		
Operating costs	\$ 767,304	\$ 421,823
Operating expenses	<u>76,907</u>	<u>67,956</u>
	<u>\$ 844,211</u>	<u>\$ 489,799</u>
An analysis of amortization by function		
Operating costs	\$ 246,104	\$ 437,980
Operating expenses	<u>2,867</u>	<u>989</u>
	<u>\$ 248,971</u>	<u>\$ 438,969</u>
<u>US\$</u>		
Property, plants, and equipment	\$ 27,202	\$ 14,630
Right-of-use asset	1,368	1,214
Intangible assets	<u>8,426</u>	<u>14,201</u>
	<u>\$ 36,996</u>	<u>\$ 30,045</u>
An analysis of depreciation by function		
Operating costs	\$ 25,967	\$ 13,646
Operating expenses	<u>2,603</u>	<u>2,198</u>
	<u>\$ 28,570</u>	<u>\$ 15,844</u>
An analysis of amortization by function		
Operating costs	\$ 8,329	\$ 14,169
Operating expenses	<u>97</u>	<u>32</u>
	<u>\$ 8,426</u>	<u>\$ 14,201</u>

e. Employee benefits expense

	<b>2020</b>	<b>2019</b>
<u>NT\$</u>		
Post-employment benefit		
Defined contribution plans	\$ 18,304	\$ 41,887
Share-based payments (Note 20)	79,498	52,884
Other employee benefits	<u>842,562</u>	<u>711,575</u>
	<u>\$940,094</u>	<u>\$806,346</u>

(Continued)

	<b>2020</b>	<b>2019</b>
An analysis of employee benefits expenses by function		
Operating costs	\$ 13,218	\$ 11,748
Operating expenses	<u>926,876</u>	<u>794,598</u>
	<u>\$940,094</u>	<u>\$806,346</u>
US\$		
Post-employment benefit		
Defined contribution plans	\$ 610	\$ 1,354
Share-based payments (Note 20)	2,690	1,711
Other employee benefits	<u>28,514</u>	<u>23,019</u>
	<u>\$ 31,814</u>	<u>\$ 26,084</u>
An analysis of employee benefits expenses by function		
Operating costs	\$ 447	\$ 379
Operating expenses	<u>31,367</u>	<u>25,705</u>
	<u>\$ 31,814</u>	<u>\$ 26,084</u>
		(Concluded)

f. Employees' compensation and remuneration of directors

According to the Company's Articles, the Company accrues employees' compensation and remuneration of directors at rates of no less than 1% and no higher than 2%, respectively, of net profit before income tax prior to deducting the aforementioned compensation and remuneration. The employees' compensation and remuneration of directors for 2020 and 2019 approved by the Company's board of directors were as follows:

	<b>2020</b>	
	<b>US\$</b>	<b>NT\$</b>
Employees' compensation	\$ 3266	\$ 96,515
Remuneration of directors	<u>817</u>	<u>24,128</u>
	<u>\$ 4,083</u>	<u>\$120,643</u>
	<b>2019</b>	
	<b>US\$</b>	<b>NT\$</b>
Employees' compensation	\$ 1,510	\$ 46,692
Remuneration of directors	<u>378</u>	<u>11,673</u>
	<u>\$ 1,888</u>	<u>\$ 58,365</u>
Amount recognized in the annual consolidated statements	<u>\$ 1,888</u>	<u>\$ 58,365</u>

Accrual rate

	<b>December 31</b>	
	<b>2020</b>	<b>2019</b>
Employees' compensation	8%	8%
Remuneration of directors	2%	2%

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.

Information on the employees' compensation and remuneration of directors resolved by the Company's board of directors is available at the Market Observation Post System website of the TWSE.

## 24. INCOME TAX

a. Major components of tax expenses recognized in profit or loss were as follows:

	2020		2019	
	US\$	NT\$	US\$	NT\$
Current tax				
In respect of the current year	\$ 9,284	\$ 274,335	\$ 2,762	\$ 85,372
Adjustments for prior years	14	435	(130)	(4,032)
	<u>9,298</u>	<u>274,770</u>	<u>2,632</u>	<u>81,340</u>
Deferred tax				
In respect of the current year	(835)	(24,686)	337	10,431
tax rate change	27	789	-	-
	<u>(808)</u>	<u>(23,897)</u>	<u>337</u>	<u>10,431</u>
Income tax expense recognized in profit or loss	<u>\$ 8,490</u>	<u>\$ 250,873</u>	<u>\$ 2,969</u>	<u>\$ 91,771</u>

A reconciliation of accounting profit and income tax expenses is as follows:

	2020		2019	
	US\$	NT\$	US\$	NT\$
Profit before tax from continuing operations	\$ 36,745	\$ 1,085,790	\$ 16,993	\$ 525,283
Income tax expense calculated at the statutory rate	8,615	254,559	3,050	94,284
Permanent differences	(637)	(18,820)	(117)	(3,608)
Unrecognized loss carryforwards and temporary differences	471	13,910	166	5,127
Adjustments for prior years	<u>41</u>	<u>1,224</u>	<u>(130)</u>	<u>(4,032)</u>
Income tax expense recognized in profit or loss	<u>\$ 8,490</u>	<u>\$ 250,873</u>	<u>\$ 2,969</u>	<u>\$ 91,771</u>

The income tax rate was 20% and the rate of unappropriated earnings was 5% used by the Group's subsidiary located in Taiwan according to the Income Tax Acts of the Republic of China. The tax rate for subsidiary located in China, Alchip Shanghai is entitled to a preferential tax rate for Chinese high-tech enterprises of 15% from 2019 to 2021, other China subsidiaries have enjoyed exemption from income taxation for the first two years and half reduction for the following three years. The applicable tax rate used by the Group's subsidiary located in Japan was approximately 37%.

b. Deferred tax assets and liabilities

The movements of deferred tax assets were as follows:

For the year ended December 31, 2020

NT\$

<b>Deferred Tax Assets</b>	<b>Opening Balance</b>	<b>Recognized in Profit or Loss</b>	<b>Exchange Differences</b>	<b>Closing Balance</b>
Temporary differences				
Unrealized loss on inventory	\$ 11,147	\$ 8,932	\$ (881)	\$ 19,198
Intangible assets	-	6,126	(221)	5,905
Unrealized exchange gain or loss	<u>2,068</u>	<u>2,395</u>	<u>(190)</u>	<u>4,273</u>
	13,215	17,453	(1,292)	29,376
Tax losses	<u>13,185</u>	<u>(4,785)</u>	<u>(486)</u>	<u>7914</u>
	<u>\$ 26,400</u>	<u>\$ 12,668</u>	<u>\$ (1,778)</u>	<u>\$ 37,290</u>
<b>Deferred Tax Liabilities</b>				
Temporary differences				
Intangible assets	<u>\$ 12,209</u>	(\$ 11,229)	(\$ 204)	<u>\$ 776</u>

US\$

<b>Deferred Tax Assets</b>				
Temporary differences				
Unrealized loss on inventory	\$ 372	\$ 302	\$ -	\$ 674
Intangible assets	-	207	-	207
Unrealized exchange gain or loss	<u>69</u>	<u>81</u>	<u>-</u>	<u>150</u>
	441	590	-	1031
Tax losses	<u>440</u>	<u>(162)</u>	<u>-</u>	<u>278</u>
	<u>\$ 881</u>	<u>\$ 428</u>	<u>\$ -</u>	<u>\$ 1,309</u>
<b>Deferred Tax Liabilities</b>				
Temporary differences				
Intangible assets	<u>\$ 407</u>	<u>\$ (380)</u>	<u>\$ -</u>	<u>\$ 27</u>

For the year ended December 31, 2019

NT\$

<b>Deferred Tax Assets</b>	<b>Opening Balance</b>	<b>Recognized in Profit or Loss</b>	<b>Exchange Differences</b>	<b>Closing Balance</b>
Temporary differences				
Unrealized loss on inventory	\$ 14,152	\$ (3,111)	\$ (254)	\$ 11,147
Unrealized exchange gain or loss	<u>385</u>	<u>1,745</u>	<u>(62)</u>	<u>2,068</u>
	14,897	(1,366)	(316)	13,215
Tax losses	<u>19,992</u>	<u>(6,527)</u>	<u>(280)</u>	<u>13,185</u>
	<u>\$ 34,889</u>	<u>\$ (7,893)</u>	<u>\$ (596)</u>	<u>\$ 26,400</u>

**Deferred Tax Liabilities**

Temporary differences				
Intangible assets	<u>\$ 9,986</u>	<u>\$ 2,538</u>	<u>\$ (315)</u>	<u>\$ 12,209</u>

US\$

**Deferred Tax Assets**

Temporary differences				
Unrealized loss on inventory	\$ 472	\$ (100)	\$ -	\$ 372
Unrealized exchange gain or loss	<u>13</u>	<u>56</u>	<u>-</u>	<u>69</u>
	485	(44)	-	441
Tax losses	<u>651</u>	<u>(211)</u>	<u>-</u>	<u>440</u>
	<u>\$ 1,136</u>	<u>\$ (255)</u>	<u>\$ -</u>	<u>\$ 881</u>

**Deferred Tax Liabilities**

Temporary differences				
Intangible assets	<u>\$ 325</u>	<u>\$ 82</u>	<u>\$ -</u>	<u>\$ 407</u>

c. Income tax assessments

Tax returns of Alchip Technologies Inc. and Alchip Taiwan Branch through 2018 have been assessed by the tax authorities, and there is no significant difference between the assessment results and the income tax returns filed.



## 25. EARNINGS PER SHARE

	2020		2019	
	US\$	NT\$	US\$	NT\$
	<b>Unit: US\$/NT\$ Per Share</b>			
Basic earnings per share in profit or loss	<u>\$ 0.46</u>	<u>\$ 13.61</u>	<u>\$ 0.23</u>	<u>\$ 7.20</u>
Diluted earnings per share	<u>\$ 0.43</u>	<u>\$ 12.64</u>	<u>\$ 0.22</u>	<u>\$ 6.89</u>

The information used for the computation of earnings per share is as follows:

	2020		2019	
	US\$	NT\$	US\$	NT\$
Profit for the period attributable to owners of the Company	<u>\$ 28,255</u>	<u>\$ 834,917</u>	<u>\$ 14,024</u>	<u>\$ 433,512</u>
Earnings used in the computation of basic and diluted earnings per share	<u>\$ 28,255</u>	<u>\$ 834,917</u>	<u>\$ 14,024</u>	<u>\$ 433,512</u>

	<b>Unit: Thousand Shares</b>	
	<b>2020</b>	<b>2019</b>
<u>Number of shares</u>		
Weighted average number of ordinary shares in computation of basic earnings per share	61,340	60,176
Effect of potentially dilutive ordinary shares:		
Employee share option	4,546	2,477
Employees' compensation or bonus issue to employees	<u>184</u>	<u>267</u>
Weighted average number of ordinary shares in computation of diluted earnings per share	<u>66,070</u>	<u>62,920</u>

If the Group offered to settle compensation paid to employees in cash or shares, the Group assumed that 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 was 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. CASH FLOW INFORMATION

### Non-cash Transactions

	December 31			
	2020		2019	
	US\$	NT\$	US\$	NT\$
Additions of property, plant and equipment	\$ 42,869	\$ 1,266,723	\$ 7,306	\$ 534,950
Changes in payments for equipment	469	14,562	(789)	(23,639)
Changes in payments for leases	1	34	1	31
Effect of Foreign Currency Exchange Differences	<u>-</u>	<u>(691)</u>	<u>-</u>	<u>(738)</u>
Payments for property, plant and equipment	<u>\$ 43,339</u>	<u>\$ 1,280,628</u>	<u>\$ 16,518</u>	<u>\$ 510,604</u>
Additions of intangible assets	\$ 5,353	\$ 158,178	\$ 16,813	\$ 519,709
Changes in prepayments for intangible assets	2,966	83,042	(419)	(13,572)
Changes in other payables	2,933	92,559	(4,974)	(148,374)
Effect of Foreign Currency Exchange Differences	<u>-</u>	<u>(1,298)</u>	<u>-</u>	<u>(4,779)</u>
Payments for intangible assets	<u>\$ 11,252</u>	<u>\$ 332,481</u>	<u>\$ 11,420</u>	<u>\$ 352,984</u>

## 27. CAPITAL MANAGEMENT

The Group is a fabless application specific circuit provider and expects significant capital expenditure on the purchase of machinery equipment and SIP now and in the near future. Accordingly, the Group's objective is to maintain necessary operating capital, the availability of funds for research and development, the capacity to pay dividends, etc. The Group continuously evaluates the policy of capital management with a conservative attitude.

## 28. FINANCIAL INSTRUMENTS

### a. Fair value of financial instruments that are not measured at fair value

Management believes the carrying amounts of financial assets and financial liabilities recognized in the consolidated financial statements as approximate their fair values. Accordingly, the Group takes the carrying amount of those financial assets and liabilities as the basis for evaluating the fair value.

### b. Fair value of financial instruments that are measured at fair value on a recurring basis

#### 1) Fair value hierarchy

The Group's financial instruments measured at fair value are financial assets at FVTOCI. Based on the extent that fair value can be observed, the fair value measurements of debt instruments and equity instruments are grouped into Level 2 and Level 3, respectively. Accordingly, the Group takes the carrying amount of these financial assets and liabilities as the basis for evaluating the fair value.

2) Valuation techniques and inputs applied for Level 2 fair value measurement

<u>Financial Instruments</u>	<u>Valuation Techniques and Inputs</u>
Foreign bonds investment	Adjusted integration of quoted prices or settlement prices from stock exchange market participants for each corporate bond.

3) Valuation techniques and inputs applied for Level 3 fair value measurement

The fair values of private foreign equity investments are mainly determined by the latest net worth of investee and the financial and operating information of observable companies.

There were no transfers of fair value measurements between Level 1 and Level 2 for the years ended December 31, 2020 and 2019.

c. Categories of financial instrument

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
<u>NT\$</u>		
<u>Financial assets</u>		
Financial assets at amortized cost (Note 1)	\$5,646,538	\$3,310,165
Financial assets at FVTOCI		
Debt instrument	232,887	457,580
Equity instrument	120,680	-
<u>Financial liabilities</u>		
Amortized cost (Note 2)	542,187	703,891
<u>US\$</u>		
<u>Financial assets</u>		
Financial assets at amortized cost (Note 1)	\$ 198,264	\$ 110,413
Financial assets at FVTOCI		
Debt instrument	8,178	15,263
Equity instrument	4,237	-
<u>Financial liabilities</u>		
Amortized cost (Note 2)	19,038	23,478

Note 1: The balances included financial assets at amortized cost, which comprise cash and cash equivalents, accounts receivable, and other receivable.

Note 2: The balances include financial liabilities at amortized cost, which comprise of short-term loans, accounts payable and other payable.

d. Financial risk management objectives and policies

The Group's major financial instruments include debt investments, accounts receivable, accounts payable, borrowings, and lease liabilities. The Group's corporate treasury function provides services to the business, coordinates access to domestic and international financial markets, and monitors and manages the financial risks relating to the operations of the Group through internal risk reports. These risks include market risk (including foreign currency risk, interest rate risk and other price 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) Exchange rate risk

The Group uses USD and JPY as the functional currency, and mainly possesses a small amount of NTD and RMB, etc. for the payment of employee salaries and operating expenses of each subsidiary (branch); therefore, there is no material exchange rate fluctuation risk. Since the Company is listed for trading on the Taiwan Stock Exchange, it can be expected that in the future, when dividends are issued to domestic investors in NTD or when funds are raised domestically in NTD such that the amount needs to be exchanged to USD for use, there is an exchange rate risk in the exchange of TWD to USD, and the possible responsive measures adopted by the financial department of the Group are as follows:

- i. The Group maintains an adequate level of foreign currency reserve based on predicted exchange rate to provide for subsidiaries' operating activities and to lessen the impact on adverse exchange fluctuations to the net income;
- ii. The Group continuously monitors exchange rate fluctuations and maintaining close relationships with principal correspondent banks to provide management with sufficient information as a basis for managing exchange rate fluctuations;
- iii. The Group reduces the impact of adverse exchange rate fluctuations on the Group's net income by using natural write off (i.e. a majority of sales and purchase transactions are denominated in USD) and by using foreign currency loans or forward exchange contracts when needed.

Refer to Note 31 for the carrying amounts of monetary assets and liabilities not denominated in functional currency at the end of the reporting period.

Sensitivity analysis

The Group is mainly exposed to exchange rate fluctuation in RMB and USD.

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

**Unit: In Thousands of U.S. Dollars**

	Impact of RMB		Impact of USD		Impact of NTD	
	2020	2019	2020	2019	2020	2019
Profit/loss	\$ 945	\$ 40	\$ 128	\$ 316	\$ (14)	\$ (58)

b) Interest rate risk

The Group was exposed to interest rate risk because entities in the Group borrows funds at floating interest rate. The carrying amounts of the s financial assets and liabilities with exposure to interest rates at the end of reporting period were as follows:

	<u>December 31</u>	
	<u>2020</u>	<u>2019</u>
<u>NT\$</u>		
Fair value interest rate risk		
Financial assets	\$ 781,073	\$ 457,885
Financial liabilities	113,818	111,381
Cash flow interest rate risk		
Financial assets	4,582,114	2,365,883
Financial liabilities	-	15,496
<u>US\$</u>		
Fair value interest rate risk		
Financial assets	\$ 27,426	\$ 15,273
Financial liabilities	3,997	3,715
Cash flow interest rate risk		
Financial assets	160,889	78,915
Financial liabilities	-	517

The Group was exposed to cash flow interest rate risk in relation to variable-rate financial institutions borrowings until May 2020. The cash flow interest rate risk was mainly concentrated in the fluctuation of the Open Fed Fund rate.

Sensitivity analysis

The sensitivity analysis below was determined based on the Group's exposure to interest rates for non-derivative instruments at the end of the reporting period. A 25 basis point increase or decrease was used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

If interest rates had been 25 basis points higher/lower and all other variables were held constant, the Group's pre-tax profit for the years ended December 31, 2020 and 2019 would have increased/decreased by NT\$11,455 thousand (US\$402 thousand) and increased/decreased by NT\$5,876 thousand (US\$196 thousand), respectively.

2) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in a financial loss to the Group. As at the end of the reporting period, the Group's maximum exposure to credit risk, which would cause a financial loss to the Group due to the failure of the counterparty to discharge its obligation.

The Group adopted a policy of only dealing with credit worthy counterparties as a means of mitigating the risk of financial loss from defaults. Credit exposure is controlled by counterparty limits that are reviewed and approved by the finance department periodically.

The credit risk on liquid funds was limited because the counterparties are banks with high credit ratings assigned by international credit-rating agencies.

The Group's concentration of credit risk of 13% and 26% of total accounts receivable as of December 31, 2020 and December 31, 2019, respectively, was related to the Group's largest customer.

### 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.

#### a) Liquidity and interest risk rate tables

The following table details the Group's remaining contractual maturity for its non-derivative financial liabilities with agreed repayment periods. The tables were drawn up based on the undiscounted cash flows of financial liabilities from the earliest date on which the Group can be required to pay. The interest recognition is not material.

	December 31, 2020									
	Less than 1 Month	1 to 3 Months	3 Months to 1 Year	1-5 Years	More than 5 Years	Less than 1 Month	1 to 3 Months	3 Months to 1 Year	1-5 Years	More than 5 Years
	NTS	NTS	NTS	NTS	NTS	US\$	US\$	US\$	US\$	US\$
Non-derivative financial liabilities										
Accounts payable	\$ 220,522	\$ 146,990	\$ -	\$ -	\$ -	\$ 7,743	\$ 5,161	\$ -	\$ -	\$ -
Other payables	166,596	8,079	-	-	-	5,850	284	-	-	-
Lease liabilities	3,686	7,372	33,177	56,234	17,710	129	259	1,165	1,975	621
	<u>\$ 390,804</u>	<u>\$ 162,441</u>	<u>\$ 33,177</u>	<u>\$ 56,234</u>	<u>\$ 17,710</u>	<u>\$ 13,722</u>	<u>\$ 5,704</u>	<u>\$ 1,165</u>	<u>\$ 1,975</u>	<u>\$ 621</u>

	December 31, 2019							
	Less than 1 Month	1 to 3 Months	3 Months to 1 Year	1-5 Years	Less than 1 Month	1 to 3 Months	3 Months to 1 Year	1-5 Years
	NTS	NTS	NTS	NTS	US\$	US\$	US\$	US\$
Non-derivative financial liabilities								
Accounts payable	\$ 270,842	\$ 144,193	\$ -	\$ -	\$ 9,034	\$ 4,810	\$ -	\$ -
Other payables	264,733	8,627	-	-	8,830	287	-	-
Lease liabilities	3,424	6,848	30,816	76,304	114	228	1,028	2,545
Variable interest rate liabilities	-	-	15,496	-	-	-	517	-
	<u>\$ 538,999</u>	<u>\$ 159,668</u>	<u>\$ 46,312</u>	<u>\$ 76,304</u>	<u>\$ 17,978</u>	<u>\$ 5,325</u>	<u>\$ 1,545</u>	<u>\$ 2,545</u>

#### b) Financing facilities

	December 31	
	2020	2019
<u>NTS</u>		
Secured bank loan facilities:		
Amount used	\$ -	\$ 15,496
Amount unused	<u>712,000</u>	<u>734,004</u>
	<u>\$ 712,000</u>	<u>\$ 749,500</u>
<u>US\$</u>		
Secured bank loan facilities:		
Amount used	\$ -	\$ 517
Amount unused	<u>25,000</u>	<u>24,483</u>
	<u>\$ 25,000</u>	<u>\$ 25,000</u>

For the restriction conditions of the borrowings described above, refer to Note 17.

## 29. TRANSACTIONS WITH RELATED PARTIES

Balances and transactions between the Group and its subsidiaries, which are related parties of the Group, have been eliminated on consolidation and are not disclosed in this note.

Remuneration of directors and key management personnel is as follows.

	2020	2019
<u>NT\$</u>		
Other employee benefits	\$169,387	\$ 122,853
Share-based payments	22,075	16,247
Post-employment benefits	<u>685</u>	<u>822</u>
	<u>\$ 192,147</u>	<u>\$ 139,922</u>
<u>US\$</u>		
Other employee benefits	\$ 5,733	\$ 3,973
Share-based payments	747	526
Post-employment benefits	<u>23</u>	<u>27</u>
	<u>\$ 6,503</u>	<u>\$ 4,526</u>

The remuneration of directors and key executives was determined by the remuneration committee with regard to the performance of individuals and market trends.

## 30. SIGNIFICANT SUBSEQUENT EVENTS

On December 18, 2020, the extraordinary shareholders meeting of the Company resolved to issue 7,600,000 new common shares to be offered in the form of global depository receipts (GDR) for raising funds to purchase equipment. Each GDR represents one common share of the Company with offering price at US\$25.73 per unit and the total proceeds from the offering were US\$195,548 thousand. This GDR was listed in Luxembourg Exchange on January 20, 2021.

## 31. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The Group's significant financial assets and liabilities denominated in foreign currencies aggregated by the foreign currencies other than functional currencies of the entities in the Group and the related exchange rates between foreign currencies and respective functional currencies were as follows:

For the year ended December 31, 2020

	Foreign Currencies (In Thousands)	Exchange Rate	Carrying Amount (US\$ in Thousands)
<u>Financial assets</u>			
Monetary items			
RMB	\$ 149,942	0.153259 (RMB:USD)	\$ 22,980
USD	7,146	103.071532 (USD:JPY)	7,146
NTD	41,695	0.035112 (NTD:USD)	<u>1,464</u>
			<u>\$ 31,590</u>

	<b>Foreign Currencies (In Thousands)</b>	<b>Exchange Rate</b>	<b>Carrying Amount (US\$ in Thousands)</b>
<u>Financial liabilities</u>			
Monetary items			
RMB	26,687	0.153259 (RMB:USD)	\$ 4,090
USD	4,577	103.071532 (USD:JPY)	4,577
NTD	49,813	0.035112 (NTD:USD)	<u>1,749</u>
			<u>\$ 10,416</u>

For the year ended December 31, 2019

	<b>Foreign Currencies (In Thousands)</b>	<b>Exchange Rate</b>	<b>Carrying Amount (US\$ in Thousands)</b>
<u>Financial assets</u>			
Monetary items			
RMB	\$ 23,975	0.143345 (RMB:USD)	\$ 3,437
USD	8,346	108.624810 (USD:JPY)	8,346
NTD	13,977	0.033356 (NTD:USD)	<u>466</u>
			<u>\$ 12,249</u>

	<b>Foreign Currencies (In Thousands)</b>	<b>Exchange Rate</b>	<b>Carrying Amount (US\$ in Thousands)</b>
<u>Financial liabilities</u>			
Monetary items			
RMB	18,339	0.143345 (RMB:USD)	\$ 2,629
USD	2,036	108.624810 (USD:JPY)	2,036
NTD	48,862	0.033356 (NTD:USD)	<u>1,630</u>
			<u>\$ 6,295</u>

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

Foreign Currencies	<u>2020</u>		<u>2019</u>	
	Exchange Rate	Net Foreign Exchange Gain (Loss) (US\$ in Thousands)	Exchange Rate	Net Foreign Exchange Gain (Loss) (US\$ in Thousands)
RMB	0.14493 (RMB:USD)	\$ 268	0.1450 (RMB:USD)	\$ 92
USD	106.71219 (USD:JPY)	(172)	108.95620 (USD:JPY)	(47)
NTD	0.033842 (NTD:USD)	<u>(136)</u>	0.03235 (NTD:USD)	<u>39</u>
		<u>\$ (40)</u>		<u>\$ 84</u>



### 32. SEPARATELY DISCLOSED ITEMS

- a. Information about significant transactions and b. investees
  - 1) Financing provided to others: None
  - 2) Endorsements/guarantees provided: None
  - 3) Marketable securities held: (Table 1)
  - 4) Marketable securities acquired and disposed of at costs or prices of at least NT\$300 million or 20% of the paid-in capital: None
  - 5) Acquisitions of individual real estate at costs of at least NT\$300 million or 20% of the paid-in capital: None
  - 6) Disposals 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: (Table 3)
  - 9) Trading in derivative instruments: None
  - 10) Intercompany relationships and significant intercompany transactions: (Tables 4)
  - 11) Information on investees: (Table 5)
- 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, ownership percentage, net income of investees, investment income or loss, carrying amount of the investment at the end of the period, repatriations of investment income, and limit on the amount of investment in the mainland China area: (Table 6)
  - 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 receiving of services.

d. Information of major shareholders:

List all shareholders with ownership of 5% or greater showing the name of the shareholder, the number of shares owned, and percentage of ownership of each shareholder: None.

### **33. SEGMENT INFORMATION**

a. Operating segment

The Group is engaged in research and development, design, and manufacturing of ASIC and SOC and provides related services. These activities are deemed single industry; accordingly, management considers the Group as having only one reportable segment.

b. Geographical information

The Group operates in three principal geographical areas - Japan, Taiwan and China.

The Group's revenue from continuing operations from external customers by location of operations and information about its non-current assets (excluding deferred income tax assets) by location of assets are detailed below.

	<b>Revenue from External Customers</b>		<b>Non-current Assets</b>	
	<b>December 31</b>		<b>December 31</b>	
	<b>2020</b>	<b>2019</b>	<b>2020</b>	<b>2019</b>
<b>NT\$</b>				
China	\$ 4,563,634	\$ 2,611,565	\$ 228,429	\$ 182,801
Japan	1,041,424	758,097	65,432	12,830
United States	672,600	644,164	4,364	364
Europe	505,645	53,608	-	-
Taiwan	290,651	260,117	884,222	420,649
Others	<u>4,905</u>	<u>4,405</u>	<u>199,803</u>	<u>473,775</u>
	<u>\$ 7,078,919</u>	<u>\$ 4,331,956</u>	<u>\$ 1,382,250</u>	<u>\$ 1,090,419</u>
<b>US\$</b>				
China	\$ 154,443	\$ 84,484	\$ 8,021	\$ 6,097
Japan	35,244	24,524	2,297	428
United States	22,762	20,839	153	12
Europe	17,112	1,734	-	-
Taiwan	9,836	8,415	31,047	14,031
Others	<u>168</u>	<u>142</u>	<u>7,016</u>	<u>15,803</u>
	<u>\$ 239,565</u>	<u>\$ 140,138</u>	<u>\$ 48,534</u>	<u>\$ 36,371</u>

c. Major customers representing at least 10% of net revenue:

<b>Customer</b>	<b>2020</b>			<b>2019</b>		
	<b>US\$</b>	<b>NT\$</b>	<b>%</b>	<b>US\$</b>	<b>NT\$</b>	<b>%</b>
Customer A	\$ 94,472	\$ 2,791,567	39	\$ 39,091	\$ 1,208,388	28
Customer B	(Note)	(Note)	(Note)	26,443	817,391	19

Note: Revenue from the customer for the indicated period was less than 10% of the Group's revenue.

TABLE 1

## ALCHIP TECHNOLOGIES, LIMITED AND SUBSIDIARIES

MARKETABLE SECURITIES HELD  
DECEMBER 31, 2020  
(In Thousands of New Taiwan Dollars)

Holding Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2020			Note	
				Shares (In Thousand)	Carrying Amount	Percentage of Ownership %		Fair Value
Alchip BVI	Corporate bonds	-	Investments in debt instrument at FVTOCI - current	1,000	\$ 28,557	-	\$ 28,557	-
	Korean Air Lines Co Ltd.	-	"	450	1,041	-	1,041	-
	Virgin Australia Holdings Ltd.	-	"	1,000	854	-	854	-
	China Energy Reserve and Chemicals Group Overseas Capital Company Limited	-	"	800	2,632	-	2,632	-
	China Energy Reserve and Chemicals Group International Holding Limited	-	"	1,000	29,870	-	29,870	-
	CenturyLink Inc.	-	Investments in debt instrument at FVTOCI - non-current	1,000	32,325	-	32,325	-
	BPCE SA	-	"	1,000	33,430	-	33,430	-
	Sprint Corp.	-	"	1,000	29,777	-	29,777	-
	Norddeutsche Landesbank	-	"	1,000	29,656	-	29,656	-
	Banco Do Brasil	-	"	200	5,101	-	5,101	-
	Vedanta Resources PLC	-	"	300	9,251	-	9,251	-
	Royal Bank	-	"	400	12,472	-	12,472	-
	Royal Bank	-	"	600	17,921	-	17,921	-
	Standard Chartered PLC	-	"	-	120,680	-	120,680	-
Alchip Shanghai	KQ (Shenzhen) Semiconductor & Technology Industry Equity Investment Fund	-	Investments in equity instrument at FVTOCI - non-current	-	-	-	-	-

Note: For the information on investments in subsidiaries, see Tables 5 and 6 for details.

TABLE 2

## ALCHIP TECHNOLOGIES, LIMITED 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, 2020  
(In Thousands of New Taiwan Dollars)

Buyer	Related Party	Relationship	Transaction Details		Abnormal Transaction		Notes/Accounts Receivable (Payable)		Note		
			Purchase/Sale	Amount	% of Total	Payment Terms	Unit Price	Payment Terms		Ending Balance	% of Total
The Company	Alchip Shanghai	Subsidiary	Purchase	\$ 393,002	8.40	Within 1 year	The same as regular terms	The same as regular transaction terms	\$ (142,400)	(28.09)	-
	Alchip KK	Subsidiary	Sale	(132,233)	(2.12)	Within 1 year	The same as regular terms	The same as regular transaction terms	127,449	19.68	-
Alchip Shanghai	The Company	Subsidiary	Sale	(393,002)	(66.74)	Within 1 year	The same as regular terms	The same as regular transaction terms	142,400	77.92	-
	Alchip Hefei	Subsidiary	Purchase	108,837	52.59	Within 1 year	The same as regular terms	The same as regular transaction terms	(18,476)	(35.74)	-
Alchip KK	The Company	Subsidiary	Purchase	132,233	22.23	Within 1 year	The same as regular terms	The same as regular transaction terms	(127,449)	(98.41)	-
	Alchip Hefei	Subsidiary	Sale	(108,837)	(77.94)	Within 1 year	The same as regular terms	The same as regular transaction terms	18,476	60.47	-

TABLE 3

## ALCHIP TECHNOLOGIES, LIMITED AND SUBSIDIARIES

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL  
 DECEMBER 31, 2020  
 (In Thousands of New Taiwan Dollars)

Company Name	Related Party	Relationship	Ending Balance	Turnover Rate	Overdue		Amounts Received in Subsequent Period	Allowance for Impairment Loss
					Amount	Actions Taken		
The Company	Alchip KK	Subsidiary	\$ 127,449	1.03	\$ -	-	\$ -	-
Alchip Shanghai	The Company	Subsidiary	142,400	1.81	-	-	-	-

**ALCHIP TECHNOLOGIES, LIMITED AND SUBSIDIARIES**  
**INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT INTERCOMPANY TRANSACTIONS**  
**FOR THE YEAR ENDED DECEMBER 31, 2020**  
(In Thousands of New Taiwan Dollars)

No. (Note 1)	Investee Company	Counterparty	Relationship (Note 2)	Transaction Details			
				Financial Statement Account	Amount (Note 4)	Payment Terms	% of Total Sales or Assets (Note 3)
0	The Company	Alchip KK Alchip KK	a a	Accounts receivable Operating revenue	\$ 127,449 132,233	Based on regular items Based on regular items	1 2
1	Alchip Shanghai	The Company The Company	b b	Accounts receivable Operating revenue	142,400 393,002	Based on regular items Based on regular items	2 6
2	Alchip Hefei	Alchip Shanghai	c	Operating revenue	108,837	Based on regular items	2
3	Alchip Jinan	Alchip Shanghai	c	Operating revenue	53,505	Based on regular items	1

Note 1: Significant transactions between the Company and its subsidiaries or among subsidiaries are numbered as follows:

- a. Fill in "0" for the parent company.
- b. Subsidiaries are listed in order.

Note 2: Relationship types are as follows:

- a. Parent to subsidiary.
- b. Subsidiary to parent.
- c. Between subsidiaries.

Note 3: For assets and liabilities, amount is shown as a percentage to consolidated total assets as of December 31, 2020, while revenues, costs and expenses are shown as a percentage to consolidated revenues for the twelve months ended December 31, 2020.

Note 4: The amount was eliminated upon consolidation.

TABLE 5

## ALCHIP TECHNOLOGIES, LIMITED AND SUBSIDIARIES

 INFORMATION ON INVESTEEES  
 FOR THE YEAR ENDED DECEMBER 31, 2020  
 (In Thousands of New Taiwan Dollars)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		As of December 31, 2020		Net Income (Loss) of the Investee	Share of Profits (Loss)	Note
				December 31, 2020	December 31, 2019	Shares (In Thousands)	%			
The Company	Alchip HK	Hong Kong	Investment	\$ 535,247 (US\$ 17,029) (Note 2)	\$ 520,687 (US\$ 16,529) (Note 2)	12,230,170	100	\$ 670,308	\$ 61,761	-
	Alchip USA	U.S.A.	Sales of ASIC and SOC.	114,922 (US\$ 3,910)	114,922 (US\$ 3,910)	391,000	100	16,907 (Note 2)	(2,946)	-
	Alchip KK	Japan	Sales of ASIC and SOC.	33,902 (JPY 100,000)	33,902 (JPY 100,000)	1	100	69,355	4,719	-
	Alchip TW Alchip BVI	Taiwan Tortola British Virgin Islands	ASIC and SOC services. Investment	473,317 (US\$ 15,100) (Note 1)	473,317 (US\$ 15,100) (Note 1)	10 50	100 100	516,976 496,986 (Note 1)	(48,389) 3,261	- -

Note 1: The investment amount of NT\$ 471,735 thousand (US\$ 15,050 thousand) has been injected. However, the procedures of capital-increase have not been completed.

Note 2: Among which, an amount of NT\$38,848 thousand (US\$1,320 thousand) has been injected. However, the procedures of capital-increase have not been completed.



TABLE 6

## ALCHIP TECHNOLOGIES, LIMITED AND SUBSIDIARIES

INFORMATION ON INVESTMENTS IN MAINLAND CHINA  
FOR THE YEAR ENDED DECEMBER 31, 2020  
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investee Company	Main Businesses and Products	Paid-in Capital	Method of Investment (Note 1)	Remittance of Funds		Accumulated Outward Remittance for Investment from Taiwan as of January 1, 2020	Accumulated Outward Remittance for Investment from Taiwan as of December 31, 2020	Net Income (Loss) of the Investee	% Ownership of Direct or Indirect Investment	Investment Gain (Loss) (Note 2)	Carrying Amount as of December 31, 2020	Accumulated Repatriation of Investment Income as of December 31, 2020
				Outward	Inward							
Alchip Shanghai	Research and development, design, and sales of ASIC and SOC related services.	\$ 364,544 (RMB 102,392)	Note 1 b.	\$ -	\$ -	\$ 364,544 (US\$ 12,800)	\$ 364,544 (US\$ 12,800)	\$ 33,164	100	\$ 33,164 b.2)	\$ 421,690	\$ -
Alchip Wuxi	Research and development and design of ASIC and SOC related services.	56,960 (RMB 12,482)	Note 1 b.	-	-	56,960 (US\$ 2,000)	56,960 (US\$ 2,000)	4,374	100	4,374 b.2)	122,937	-
Alchip Hefei	Research and development and design of ASIC and SOC related services.	14,240 (RMB 3,469)	Note 1 b.	-	-	14,240 (US\$ 500)	14,240 (US\$ 500)	19,025	100	19,025 b.2)	64,121	-
Alchip Jinan	Research and development and design of ASIC and SOC related services.	22,328 (RMB 5,031)	Note 1 b.	-	-	22,328 (US\$ 784)	22,328 (US\$ 784)	11,490	100	11,490 b.2)	49,496	-
Alchip Guangzhou	Research and development and design of ASIC and SOC related services.	14,240 (RMB 3,417)	Note 1 b.	14,240 (US\$ 500)	-	-	14,240 (US\$ 500)	(5,877)	100	(5,877) b.2)	9,045	-

Accumulated Outward Remittance for Investment in Mainland China as of December 31, 2020	Investment Amounts Authorized by Investment Commission, MOEA	Upper Limit on the Amount of Investment Stipulated by Investment Commission, MOEA
\$ -	\$ -	\$ -

Note 1: The investment types are as follows:

- Direct investment in mainland China.
- Indirect investment in mainland China through a subsidiary in a third place. (Investor: Alchip H.K.)
- Others.

(Continued)

Note 2: In the column of investment gain or loss:

- a. It should be noted if the investment was still in preparation without investment gain or loss.
- b. The recognition basis of investment gain or loss should be noted as follows:
  - 1) The financial statement is audited by an international accounting firm cooperating with accounting firms in Taiwan.
  - 2) The financial statement is audited by a certified public accountant cooperating with the parent company in Taiwan.
  - 3) Others.

(Concluded)

Alchip Technologies, Limited

Chairman Kinying Kwan

Address : 9F., No.12, Wenhua St., Neihu Dist., Taipei 114  
Tel : (02) 2799-2318

#### Contact Information

##### Taiwan Branches (Headquarters/Manufacturing)

###### Taipei (HQ Operation)

9F, No.12, Wenhua St., Neihu Dist., Taipei, Taiwan 114

TEL: +886-2-2799-2318

FAX: +886-2-2799-7389

###### Hsinchu (MFG Operation)

11F-1, No.1, Taiyuan 1 St., Zhubei City, Hsinchu County, Taiwan 302

TEL: +886-3-560-1218

FAX: +886-3-560-1238

##### Japan Branch

###### Shin Yokohama (Sales/SoC Design Center)

10F, Shin-Yokohama Square Bldg., 2-3-12 Shin-Yokohama Kouhoku, Yokohama Kanagawa, Japan 222-0033

TEL: +81-454701090

FAX: +81-454761435

##### China Branches

###### Shanghai (Sales/Design Center)

11F, East Tower Greenland Center, 596 Longhua Middle Road, Shanghai, China 200032

TEL: +86-21-52350999

FAX: +86-21-52350777

###### Wuxi (Design Center)

4F, Building A5, No. 777, Jianzhuxi Road, Binhu District, Wuxi, Jiangsu, China 214603

TEL: +86-0510-85120332

FAX: +86-0510-85120312

###### Hefei (Design Center)

6F, Building C4, No. 800, Wangjiang West Road,

Gaoxin District, Hefei City, Anhui Province, China 231283

TEL: +86-551-65655001

###### Guangzhou (Design Center)

Room 01, 12F, Building A, Grandtek, No. 18 Science Avenue, Huangpu District, Guangzhou, Guangdong Province, China 510000

TEL: +86-20-8981-9302

FAX: +86-20-8981-9312

###### Jinan (Design Center)

1F, Building B, Qilu Software Park, No.1000 ShunHua Road, High-tech Development Zone, Ji'nan City, Shandong Province

TEL: +86-531-89017990

FAX: +86-531-89017992

##### US Branch

###### Silicon Valley (Sales Center)

1900 McCarthy Blvd, Suite 106, Milpitas, CA 95035

E: north\_america@alchip.com

