Stock code: 4968

RichWave Technology Corporation

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2022 Annual Report

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Company annual report website http://www.richwave.com.tw

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Notice to Readers:
The reader is advised that the annual report has been prepared originally in Chinese. The English version is directly translated from Chinese version.

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V. Overseas Securities Exchange Where Securities are Listed and Method of Inquiry:

Not applicable

VI. Website: http://www.richwave.com.tw

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Chapter I. Letter to Shareholders

I wish to thank the shareholders for your support in the past year. For years, RichWave has continuously launched new WiFi wireless communication IC products and focused on using its innovation, technologies, and unique market positioning to create products with market differentiation. We believe that RichWave will uphold its unique position in the market with a diverse range of wireless application.We remain confident for the future to come.

I. 2022 Business Report

(I) Consolidated Business Results

Unit: NT$ thousands

Item / Year	2022	2021	Amount of increase (decrease)	%
Operating revenue	3,429,371	5,316,267	(1,886,896)	(35.5%)
Gross operating profit	1,058,590	1,546,032	(487,442)	(31.5%)
Net operating revenue	(17,205)	533,608	(550,813)	(103.2%)
Net profit before tax	61,289	526,906	(465,617)	(88.4%)
Net profit after tax	55,059	465,517	(410,458)	(88.2%)
Comprehensive income	57,484	464,172	(406,688)	(87.6%)

(II) Budget Implementation

The Company did not prepare a financial forecast for 2020 and therefore does not have budget achievement status for reporting.

(III) Analysis of Consolidated Financial Structure, Solvency, and Profitability

		2022	2021
Financial structure (%)	Liabilities to assets ratio	31.19	27.41
	Long-term working capital to real estate, plants and equipment ratio	1,414.60	1,261.63
Solvency (%)	Current ratio	400.68	322.27
	Quick ratio	271.82	160.90
Profitability (%)	Return on assets	1.75	13.40
	Return on equity	2.31	20.31
	Ratio of net profit before tax to paid-in capital	6.80	59.56
	Profit margin	1.61	8.76
	Earnings per share	0.62	5.26

(IV) Research and Development

Unit: NT$ thousands；%

	2022	2021
R&D expenses	602,470	539,010
Operating revenue	3,429,371	5,316,267
Proportion of R&D expenses in business revenue	17.6%	10.1%

II. Summary of 2023 Business Plan

(I) 2023 Business Strategy

RichWave will uphold sustainability in its business strategy and focus on core business operations. We shall abide by regulatory requirements and change our business targets with flexibility in accordance with changes in the environment. With an experienced management team, we shall continue to maintain profitability and growth of the Company in a business environment with rapid changes.

(II) Expected Sales Volume and Its Basis

In 2023, RichWave shall continue to expand channels and expand the market scale and market share. Based on the current information we have obtained regarding the conditions and production capacity of customers, we plan to sell 1,100 to 1,400 million units. Due to the rapid changes in the market and trade environment, we shall closely monitor the market conditions to determine subsequent sales strategies.

(III) Major Production & Sales Policies

The Company's production and sales strategy in 2023 will continue to focus on aggressive market development and expansion of customer base and application areas. With our core product design capabilities, we will continue to compete head-on with foreign companies with long-held market shares to create profits for both the Company and shareholders.

(IV) Future Development Strategy

In 2022, RichWave has successfully mass-produced WiFi 6E products. Looking forward to 2023, the mobile communication and wireless communication industries will continue to flourish. In addition to continuing to improve and improve WiFi 6E products, RichWave will also mass-produce WiFi 7 products. It is expected that with the increasingly complete Wifi 6 and 6E product lines and the support of the launch of WiFi 7 products, we can expect to continue to grow in the global WiFi RF IC market revenue.

(V) Impact of the External Competitive Environment, Regulatory Environment, and Overall Business Environment

(1) Impact from Exchange Rate Changes:

RichWave's sales revenue and procurement expenditures are mostly denominated in USD and we use foreign-currency assets to offset foreign-currency liabilities to achieve natural hedging. RichWave also closely monitors information on exchange rate changes and exchange rate developments in order to adjust foreign-currency assets and liabilities in accordance with developments in the global macroeconomic environment, exchange rates, and future capital demand. These measures are taken to evade exchange rate risks and reduce the impact of exchange rate changes on the Company’s profit and loss.

(2) Risks Associated with Over-Concentration in Purchase or Sale and Response Measures:

RichWave's procurement is concentrated due to concerns in product quality and preferred purchasing price, though RichWave maintains at least two suppliers for its main materials avoid risks resulting from over-concentration in purchasing. In addition, the concentration of RichWave's sales is mainly due to the distributors' sales to customers in Taiwan and China. To mitigate the risks of over-concentration of sales, RichWave also actively develops customers with long-term cooperation and carefully selects customers of excellent financial background to lower the risks of over-concentration of sales.

(3) The Impacts of Changes of Important Domestic and Foreign Policies and Laws on the Company's Finances and Business, and the Countermeasures:

RichWave complies with all related domestic and foreign laws and regulations in day-to-day operations and continuously pays close attention to domestic and foreign policy development trends and changes in legislation to fully understand changes in the market environment. Therefore, the Company's finance and business have not been affected by major changes in government policies and laws at home and abroad in the most recent year.

(4) Overall Business Environment

RichWave continuously monitors technological changes and developments in the industry and quickly gains information on industry developments. RichWave continuously enhances its R&D capabilities, applies for patent protection for various innovative concepts and design developments, and actively expands future market applications to counter the impact of technological changes and industry changes on the Company.

Finally, RichWave's management team would like to thank the shareholders once again for the long-term support and we hope that they can continue to provide encouragement and information in the new year. RichWave will also continue to uphold our mission for maximizing profits for shareholders.

I would like to wish all our shareholders good fortune and health.

Chairman of the Board: Dye-Jyun Ma

President: Shih-Chi Wang

Chief Accounting Officer: Wei-Che Hsu

Chapter II. Company Profile

I. Date of incorporation

Jan. 7, 2004

II. Company History

Date	Company History
Jan. 2004	The Company was incorporated with an initial capital of NT$1,000,000.
Feb. 2004	Applied for renaming the Company to Lihui Technology Co., Ltd.
Mar. 2004	Cash capital increase of NT$199,000,000 to increase the paid-up capital to NT$200,000,000.
Jun. 2004	Relocated the Company to 3F, No. 1, Alley 20, Lane 407, Sec. 2, Tiding Blvd., Neihu District, Taipei City.
Jul. 2004	Launched the first CMOS Synthesizer + VCO single chip400-2500MHz in Taiwan.
Mar. 2005	Launched the first highly integrated CMOS 2.4GHz AV Transceiver in Taiwan.
May 2005	Launched the first SiGe WiFi 802.11 b/g power amplifier with successful mass production in Taiwan.
May 2005	Cash capital increase of NT$66,660,000 to increase the paid-up capital to NT$266,660,000.
Apr. 2006	Cash capital increase of NT$50,000,000 to increase the paid-up capital to NT$316,660,000.
Jul. 2006	Launched SiGe WiFi 802.11per-n power amplifier with successful mass production.
Nov. 2006	Launched WiFi 802.11b/g power amplifier module with successful mass production.
Jan. 2007	Launched the first RF LNA with successful mass production.
Jun. 2007	Launched WiFi power amplifier module with successful mass production.802.11a
Jul. 2007	Launched WiFi 802.11a/b/g dual-band power amplifier with successful mass production.
Aug. 2007	Launched the first highly integrated CMOS 2.4GHz/5.8GHz Dual band AV Transceiver.
Nov. 2007	Cash capital increase of NT$30,000,000 to increase the paid-up capital to NT$346,660,000.
Mar. 2008	Launched WiFi 802.11n power amplifier with successful mass production.
Dec. 2008	Converted employee subscription warrants to shares totaling NT$6,750,000 to increase the paid-up capital to NT$353,410,000.
Apr. 2009	Launched the first RF Switch with successful mass production.
Apr. 2009	Launched Front-End Module (FEM)with successful mass production.
Jun. 2009	Launched the first Zero BOM FM single chip with successful mass production.
Jun. 2009	Converted employee subscription warrants to shares totaling NT$800,000 to increase the paid-up capital to NT$354,210,000.

Date	Company History
Feb. 2010	Converted employee subscription warrants to shares totaling NT$10,920,000 to increase the paid-up capital to NT$365,130,000.
Mar. 2010	Launched WIMAX PA with successful mass production.
Jun. 2010	Launched the first Digital AV Transceiver and Processor with successful mass production.
Jun. 2010	Cash capital increase of NT$15,000,000 to increase the paid-up capital to NT$380,130,000.
Jun. 2010	Converted employee bonus and earnings to capital increase of NT$8,914,360 to increase the paid-up capital to NT$390,005,860.
Jul. 2010	Launched WiFi Front-End Module (FEM) for mobile.
Jul. 2010	Converted employee subscription warrants to shares totaling NT$2,700,000 to increase the paid-up capital to NT$392,705,860.
Aug. 2010	Received approval from the Financial Supervisory Commission for public issuance of the Company's stocks.
Oct. 2010	Officially registered as an emerging stock on the Gre Tai Securities Market.
Dec. 2010	Launched Femtocell PA with successful mass production.
Apr. 2011	Converted employee subscription warrants to shares totaling NT$10,050,000 to increase the paid-up capital to NT$402,755,860.
Jul. 2011	Launched Multi-Switch for Satellite with successful mass production.
Nov. 2011	Converted employee subscription warrants to shares totaling NT$780,000 to increase the paid-up capital to NT$403,535,860.
May. 2012	Converted employee subscription warrants to shares totaling NT$590,000 to increase the paid-up capital to NT$404,125,860.
Jun. 2012	Launched LTE and 3G Femto PA with successful mass production.
Sep. 2012	Converted employee subscription warrants to shares totaling NT$720,000 to increase the paid-up capital to NT$404,845,860.
Nov. 2012	Launched 2.4GHz Wireless Car rearview System with successful mass production.
Feb. 2013	Launched 2x2 and 4x2 LNB SW with successful mass production.
Apr. 2013	Converted employee subscription warrants to shares totaling NT$4,800,000 to increase the paid-up capital to NT$409,645,860.
Jun. 2013	Launched 4-in-1 wireless surveillance and remote monitoring system through the Internet by handset, with successful mass production.
Jul. 2013	Launched WiFi 802.11ac 5GHz RF component, obtained certification for main chipset with successful mass production.
Aug. 2013	Converted employee subscription warrants to shares totaling NT$930,000 to increase the paid-up capital to NT$410,575,860.
Feb. 2014	Launched 2.4GHz SOI antenna switch products with better ESD protection with successful mass production.
Apr. 2014	Converted employee subscription warrants to shares totaling NT$8,720,000 to increase the paid-up capital to NT$419,295,860.

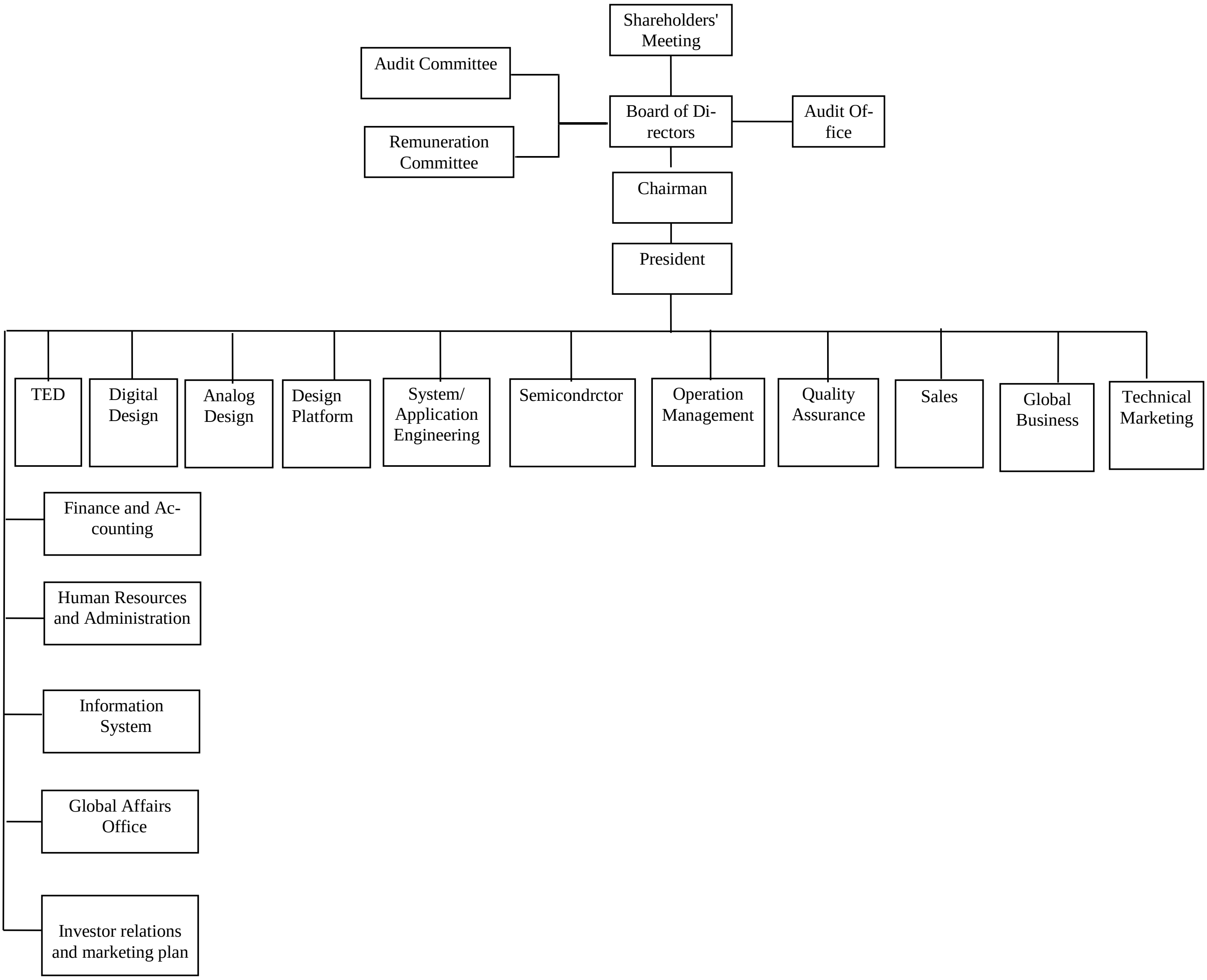
Date	Company History
Aug. 2014	Converted employee subscription warrants to shares totaling NT$5,010,000 to increase the paid-up capital to NT$424,305,860.
Feb. 2015	Received the approval document for technology business from the Industrial Development Bureau, Ministry of Economic Affairs.
Mar. 2015	Converted employee subscription warrants to shares totaling NT$14,850,000 to increase the paid-up capital to NT$439,155,860.
Sep. 2015	Converted employee subscription warrants to shares totaling NT$820,000 to increase the paid-up capital to NT$439,975,860.
Nov. 2015	Cash capital increase of NT$59,000,000 to increase the paid-up capital to NT$498,975,860.
Nov. 2015	Taiwan Stock Exchange Corporation approved the Company's public listing on the Exchange.
May. 2016	Launched WiFi SW for AOA applications and obtained certification for main chipset with successful mass production.
Jul. 2016	Launched high-power 5GHz FEM for 802.11ac with successful mass production.
Aug. 2016	Converted earnings to capital increase of NT$49,897,580 to increase the paid-up capital to NT$548,873,440.
Oct. 2018	Converted earnings to capital increase of NT$54,887,340 to increase the paid-up capital to NT$603,760,780.
Dec. 2018	Established the offshore investment company Minerva Technology Co. in Belize
Jan. 2019	Established the subsidiary Aegis Link Corp. in the United States.
Jun. 2019	Launched high-power 5GHz FEM for 802.11ax with successful mass production.
Aug. 2019	Converted employee subscription warrants to shares totaling NT$10,270,000 to increase the paid-up capital to NT$614,030,780.
Nov. 2019	Converted employee subscription warrants to shares totaling NT$4,750,000 to increase the paid-up capital to NT$618,780,780.
Mar. 2020	Converted employee subscription warrants to shares totaling NT$2,650,000 to increase the paid-up capital to NT$621,430,780.
Aug. 2020	Converted employee subscription warrants to shares totaling NT$10,490,000 to increase the paid-up capital to NT$631,920,780.
Apr. 2021	Established Subsidiary in Shen Zhen.
Oct. 2021	Converted earnings to capital increase of NT$252,768,280 to increase the paid-up capital to NT$884,689,060.
Jan. 2022	SAP/PLM system officially launched.
July 2022	First domestic unsecured convertible corporate bonds listed on the Taipei Exchange.
October 2022	Cash capital increase of NT$17,000,000, bringing paid-in capital to NT$901,689,060

Chapter III. Corporate Governance Report

I. Organization

(I) Organization chart

Apr. 20, 2023



(II) Department Functions

Unit	Main business
Audit Office	Review and assess the Company's internal controls and provide recommendations for improvement to promote business efficiency and effective implementation of internal controls.
TED	Development of advanced technologies and development and design of new products.
Analog/Digital Design/Design Process	Development of advanced technologies and development and design of new products. Review, execution, and assessment of research plans.
System/Application Engineering	Hardware assembly integration and test software development in the new product development stage. Client-end system integration and application planning, design, and assessment of new products. Integration of the Company's internal products to propose designs that meet customer demand.
Semiconductor Technology/Product Center	Operations of the manufacturing management system. Manufacturing and production technology improvements and construction management.
Operation Management	Production Plan Formulation. Supply Chain Management and Cost Control. Material and Logistics Management. Customer Service.
Quality Assurance	Planning, execution, and follow-up of internal quality auditing. Planning and setting up of quality system and quality assurance operation procedures. Management, printing, and updating of company regulations, storage and publication of standard operating procedures and quality records, and maintaining and assistance for the ISO/QS quality (environmental protection) system.
Sales	Develop product marketing strategy and market deployment.
Global Business	Development of overseas customers.
Technical Marketing	Product competitive analysis. Product planning. Product pre-promotion plan formulation.
Finance and Accounting	Responsible for fund management and allocation, transactions with financial institutions, cashier, and general shareholder services. Responsible for the establishment of an accounting system and execution of general accounting operations.

Unit	Main business
Human Resources and Administration	Oversee the administration of the Company's human resources, general affairs, and plant security. Establishment and execution of related management systems, planning and execution of training, and establishment and execution of performance evaluations.
Information system	Responsible for the Company's information system structure and information security.
Global Affairs Office	Responsible for the Company's legal and administrative affairs and review of the legality and compliance of company rules and regulations; formulation of frequently used contract templates; participation in the negotiation, drafting, review, signing, performance, arbitration, and litigation of administrative and commercial contracts, etc. Responsible for the establishment, continuous operations and supervision of the business and administrative plans of the Company's branches or representative offices across the world in accordance with local laws and regulations.
Investor relations and marketing plan	Brand image Market promotion Public relations and public announcements

II. Information on the Company's Directors, Supervisors, President, Vice Presidents, Associate Managers, and the Supervisors of All the Company's Divisions and Branch Units

(I) Directors:

Apr. 20, 2023; shareholding information as of March 27, 2023; unit: shares, %

Title	Nationality/place of registration	Name	Gender / Age	Date elected (appointed)	Term (years)	Date first elected	Shareholding when elected		Current shareholding		Spouse & minor shareholding		Shareholding by nominees		Experience (education)	Other position concurrently held at the Company or other companies	Executives, directors or supervisors who are spouses or within the second degree of kinship			Remarks
							Number of shares	Shareholding ratio	Number of shares	Shareholding ratio	Number of shares	Shareholding ratio	Number of shares	Shareholding ratio			Title	Name	Relation	
Chairman of the Board	Republic of China	Dye-Jyun Ma	Male/ 61-70 Years old	2022.05.26	3 years	2010.06.04	2,720,540	3.08%	2,804,747	3.11%	3,703,010	4.11%	–	–	PhD in Electrical Engineering, University of Maryland (United States) Professor and Dean, Department of Electrical Engineering, National Chung Hsing University Vice President, Richtek Technology Corp.	Chairman of the Company Director, Minerva Technology Co.(Belize) Director, Aegis Link Corp. (United States) Legal representative, Shenzhen YingHon Technology Corp.	President	Shih-Chi Wang	Spouse	Note 1
Director	Republic of China	Shih-Chi Wang	Female/ 61-70 Years old	2022.05.26	3 years	2004.03.18	3,606,757	4.08%	3,703,010	4.11%	2,804,747	3.11%	–	–	PhD in Electrical Engineering, University of Maryland (United States) Associate Professor, Department of Electrical Engineering, Feng Chia University Director, Electronic Technology Research and Development Department, Winbond Electronics Corporation Senior Project Manager, Taiwan Semiconductor Manufacturing Company Assistant Vice President, Ali Corporation	President of the Company	Chairman of the Board	Dye-Jyun Ma	Spouse	Note 1
Director	Republic of China	Ching-Hua Wang	Male/ 71-75 Years old	2022.05.26	3 years	2016.05.27	–	–	50,000	0.06%	–	–	–	–	PhD in Electrical Engineering, University of Southern California (United States) Manager, GaAs Operation, Hughes Aircraft Co. (United States) Senior Manager, Intel Corporation (United States) President, Advanced Wireless Semiconductor Company	–	–	–	–	–
Director	Republic of China	Wei-Kang Teng	Male/ 61-70 Years old	2022.05.26	3 years	2010.06.04	587,409	0.66%	601,874	0.67%	127	0.00%	–	–	PhD in Electrical Engineering, National Taiwan University Technical Assistant Manager, National Chung-Shan Institute of Science & Technology Technical Assistant Manager, Taiwan Semiconductor Manufacturing Company Manager, R&D Department, Ali Corporation	Senior Vice President of R&D of the Company Chairman, Aegis Link Corp. (United States)	–	–	–	–
Director	Republic of China	Tzu-Hsiang Liu	Male/ 51-60 Years old	2022.05.26	3 years	2022.05.26	562,109	0.64%	576,210	0.64%	–	–			PhD in Electronics Engineering, National Chiao Tung University Section Chief, Electronic and Optoelectronic System Research Laboratories, Industrial Technology Research Institute Technical Assistant Manager, Taiwan Semiconductor Manufacturing Company Manager, R&D Department, Ali Corporation	Vice President of the Company	–	–	–	–

Title	National-ity/place of reg-istration	Name	Gender / Age	Date elected (appointed)	Term (years)	Date first elected	Shareholding when elected		Current shareholding		Spouse & minor shareholding		Shareholding by nominees		Experience (education)	Other position concurrently held at the Company or other companies	Executives, directors or supervisors who are spouses or within the second degree of kinship			Remarks
							Number of shares	Shareholding ratio	Number of shares	Shareholding ratio	Number of shares	Shareholding ratio	Number of shares	Shareholding ratio			Title	Name	Relation	
Independent Director	Republic of China	Chih-Hung Wen	Male/ 61-70 Years old	2022.05.26	3 years	2010.12.10	–	–	10,000	0.01%	–	–	–	–	PhD in Electrical Engineering, National Taiwan University Professor, Department of Electrical Engineering and Department of Communications Engineering, National Chung Hsing University Executive Committee Member, Academia-Industry Consortium for South Taiwan Science Park	adjunct professor, Department of Electrical Engineering, Tunghai University adjunct professor, Department of Semiconductor Engineering, National Kaohsiung University of Science and Technology	–	–	–	–
Independent Director	Republic of China	Chiang-Lin Chang	Male/ 61-70	2022.05.26	3 years	2016.05.27	–	–	–	–	–	–	–	–	BS in Electrical Engineering, National Chiao Tung University Vice President of Marketing of Northeast Asia and Chief Technology Officer of Taiwan, Alcatel Executive Vice President, Unizyx Holding Corporation President, Mitrastar Technology Corporation	–	–	–	–	–
Independent Director	Republic of China	Chia-Ying Ma	Male/ 61-70	2022.05.26	3 years	2019.05.24	–	–	–	–	–	–	–	–	Professor, Department of Accounting, Soochow University Chief Research Development Officer, Soochow University Chief Secretary, Soochow University Chairperson, Department of Accounting, Soochow University Adjunct Professor, Department of Public Finance, National Chengchi University Adjunct Professor, Department of Computer Science and Information Engineering and Department of Accounting, National Chung Cheng University Adjunct Professor, College of Biological Science and Technology, National Chiao Tung University PhD in Business & Economics, Lehigh University (United States)	Full-time Professor, Department of Accounting, Soochow University Director (Legal Representative of Corporation), Union Insurance Company Independent Director, Medeon Biodesign Inc. Independent Director, Tsc Auto ID Technology Co., Ltd. Independent Director, Hiyes International Co., Ltd	–	–	–	–
Independent Director	Republic of China	Wen-Hsiang Lu	Male/ 61-70	2022.05.26	3 years	2022.05.26	–	–	–	–	–	–	–	–	Adviser and Director of Economic Section, Taipei Representative Office in the Republic of Singapore Deputy Director, Intellectual Property Office, Ministry of Economic Affairs Prosecutor, Taipei, Shilin and Hualien District Prosecutor Offices, Taiwan Judge, Civil and Criminal Court, Banqiao and Shilin District Courts, Taiwan Distinguished Professor, Peking University, University of Chinese Academy of Sciences, Nanjing Normal University	Managing Attorney, Lu Wen-Xiang Law Firm Arbitrator, Chinese Arbitration Association, Taipei Senior Advisor, Cornerstone Intellectual Property Foundation Adjunct Professor, Institute of Law, Soochow University Adjunct Professor, Institute of Intellectual Property Rights, Xiamen University	–	–	–	–

Note 3: The Company's chairman and general manager are each other's spouses; the full new election during the 2022 shareholders meeting increased the number of independent directors to 4.

(II) Disclosure of information as professional qualifications and independent status of directors and independent directors

Apr. 20, 2023

Qualification Name	Professional	Independent status	Number of Other Public Companies in Which the Individual is Concurrently Serving as an Independent Director
Dye-Jyun Ma	Possesses five or more years of business and work experience required for the Company's business. Vice President, Richtek Technology Corp. Not in contravention of Article 30 of the Company Act.	Chairman of the Company	0
Shih-Chi Wang	Possesses five or more years of business and work experience required for the Company's business. Director, Electronic Technology Research and Development Department, Winbond Electronics Corporation Senior Project Manager, Taiwan Semiconductor Manufacturing Company Assistant Vice President, Ali Corporation Not in contravention of Article 30 of the Company Act.	President of the Company	0
Ching-Hua Wang	Possesses five or more years of business and work experience required for the Company's business. Manager, GaAs Operation, Hughes Aircraft Co. (United States) Senior Manager, Intel Corporation (United States) President, Advanced Wireless Semiconductor Company Not in contravention of Article 30 of the Company Act.	No positions at other companies; holds no shares in the company	0
Wei-Kang Teng	Possesses five or more years of business and work experience required for the Company's business. Technical Assistant Manager, National Chung-Shan Institute of Science & Technology Technical Assistant Manager, Taiwan Semiconductor Manufacturing Company Manager, R&D Department, Ali Corporation Not in contravention of Article 30 of the Company Act.	Senior Vice President of R&D of the Company	0
Tzu-Hsiang Liu	PhD in Electronics Engineering, National Chiao Tung University	Vice President of the Company	0

<table>
<tr><th>Qualification Name</th><th>Professional</th><th>Independent status</th><th>Number of Other Public Companies in Which the Individual is Concurrently Serving as an Independent Director</th></tr>
<tr><td></td><td>Section Chief, Electronic and Optoelectronic System Research Laboratories, Industrial Technology Research Institute
Technical Assistant Manager, Taiwan Semiconductor Manufacturing Company
Manager, R&D Department, Ali Corporation</td><td></td><td></td></tr>
<tr><td>Chih-Hung Wen</td><td>Possesses five or more years of business and work experience required for the Company's business.
Currently adjunct professor, Department of Electrical Engineering, Tunghai University, adjunct professor, Department of Semiconductor Engineering, National Kaohsiung University of Science and Technology.
Formerly professor, Department of Electrical Engineering, Tunghai University; professor, Department of Electrical Engineering, National Chung Cheng University; and adjunct member of the standing committee of the Academia-Industry Consortium for Southern Taiwan Science Park's Communications Promotion Committee.
Not in contravention of Article 30 of the Company Act.</td><td rowspan="3">（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. Not applicable in cases where the person is an Independent Director of the Company, its parent company, or any subsidiary as appointed in accordance with the Act or with the laws of the country of the parent or subsidiary.
（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 is ranked in the top 10 in shareholdings.
（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 who directly holds more than 5% of the total issued shares of the Company, or a top 5 shareholder, or a director or supervisor representative appointed by the Company in accordance with paragraph 1 or 2, Article 27 of the Company Act (excluding independent directors appointed by both the Company and its parent company, subsidiary or subsidiaries under the same parent company pursuant to this regulation or the local regulations).
（6）Not a director, supervisor, or employee of a company with a majority of the Company's director seats or voting shares and those of any other company are controlled by the same person (this restriction does not apply</td><td>0</td></tr>
<tr><td>Chiang-Lin Chang</td><td>Possesses five or more years of business and work experience required for the Company's business.
Vice President of Marketing of Northeast Asia and Chief Technology Officer of Taiwan, Alcatel
Executive Vice President, Unizyx Holding Corporation
President, Mitrastar Technology Corporation
Not in contravention of Article 30 of the Company Act.</td><td>0</td></tr>
<tr><td>Chia-Ying Ma</td><td>Possesses five or more years of business、accounting and work experience required for the Company's business.
Full-time Professor, Department of Accounting, Soochow University
Chief Secretary, Soochow University
Chairperson, Department of Accounting, Soochow University
Adjunct Professor, Department of Public Finance, National Chengchi University</td><td>3</td></tr>
</table>

<table>
<tr><th>Qualification Name</th><th>Professional</th><th>Independent status</th><th>Number of Other Public Companies in Which the Individual is Concurrently Serving as an Independent Director</th></tr>
<tr><td></td><td>Adjunct Professor, Department of Computer Science and Information Engineering and Department of Accounting, National Chung Cheng University
Adjunct Professor, College of Biological Science and Technology, National Chiao Tung University
PhD in Business & Economics, Lehigh University (United States)
Not in contravention of Article 30 of the Company Act.</td><td rowspan="2">to independent directors in the Company, its parent company, subsidiaries, or subsidiaries of the same parent company which have been appointed in accordance with local laws or laws of the registered country).
（7）Not a director (governor), supervisor or employee of other companies or institutions who is the same person or spouse as the chairperson, president or person holding an equivalent position of the Company. (However, this restriction shall not apply to independent directors appointed in accordance with the Act or the laws and regulations of the local country by, and concurrently serving as such at, a company and its parent or subsidiary or a subsidiary of the same parent).
（8）Not a director, supervisor, manager, or shareholder holding 5% or more of the shares of a specified company or institution that has a financial or business relationship with the company (this restriction does not apply to specific companies or institutions if they hold more than 20% but less than 50% of the outstanding shares of the Company or independent directors in the Company, its parent company, subsidiaries, or subsidiaries of the same parent company which have been appointed in accordance with local laws or laws of the registered country).
（9）Not a professional individual, or an owner, partner, director, supervisor, or manager of a sole proprietorship, partnership, company, or institution that, provides auditing services to the company or any affiliate of the company, or that provides commercial, legal, financial, accounting or related services to the company or any affiliate of the company for which the provider in the past two years has received cumulative compensation exceeding NT$500,000, or a spouse thereof. However, remuneration committee, M&A audit committee members, established in accordance with local securities regulations or mergers & acquisition regulations, are not included.</td><td></td></tr>
<tr><td>Wen-Hsiang Lu</td><td>Has more than five years of work experience as the foregoing judge, prosecutor, attorney, and corporate operations, as well as a lecturer in relevant departments at public and private universities.
Formerly consultant and head of Economic Section, Taipei Representative Office in Singapore; deputy chairman of the Intellectual Property Office, Ministry of Economic Affairs; prosecutor, Taiwan Taipei, Shilin, and Hualien district prosecutor's offices; judge, civil/criminal chambers, district courts of Taiwan Banqiao and Shilin; and specially appointed professor at Peking University, University of Chinese Academy of Sciences, Nanjing Normal University
Not in contravention of Article 30 of the Company Act.</td><td>0</td></tr>
</table>

Qualification Name	Professional	Independent status	Number of Other Public Companies in Which the Individual is Concurrently Serving as an Independent Director
		（10）Does not have a marital relationship with, or a relative within the second degree of kinship with, any other Director of the Company. （11）None of the circumstances in the subparagraphs of Article 30 of the Company Act apply. （12）Not a governmental, juridical person or its representative as defined in Article 27 of the Company Act.	

Note 1: Professional qualifications and experience: State the professional qualifications and experience of individual directors and supervisors. If they are members of the audit committee and have accounting or financial expertise, state their accounting or financial background and work experience. In addition, state if there is anything related to Article 30 of the Company Act.

Note 2: Independent directors must state their independence status, including, but not limited to, whether they, their spouse, or relatives within the second degree of kinship have served as directors, supervisors, or employees of the Company or its affiliates; the number and ratio of Company shares held by them, their spouse, or relatives within the second degree of kinship (or under the name of others); whether they have served as directors, supervisors, or employees of a company that has a specific relationship with this Company (refer to Subparagraphs 5~8, Paragraph 1, Article 3 of the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies); and the remuneration received for providing business, legal, financial, accounting, and other services to this Company or its affiliates in the last 2 years.

(III) Board Diversity and Independence:

1. Board Diversity:

(1)Policy on diversification of board members:

In accordance with Chapter 3, Article 20 of this Company's "Rules of Corporate Governance Practice," requirements for strengthening the board's functions call for diversity to be considered when determining the board's composition. In view of Company's functioning, operating format, and development needs, the diversity policy drafted by this Company should include, but not be limited to, the standards in the following two major areas:

a. Basic requirements and values: Gender, age, nationality, and culture.

b. Professional knowledge and expertise: A professional background (e.g., law, accounting, industry, finance, marketing, or technology), professional skills, and industry experience.

Board members shall be equipped with knowledge, skills, and attainments generally required for performing their tasks. In order to accomplish the preferred governance goals of the Company, the Board of Directors shall generally be equipped with the following capabilities:

a. Ability to make sound business judgments.
b. Ability to perform accounting and financial analysis.
c. Ability to manage a business.
d. Ability to handle crisis management.
e. Industrial knowledge.
f. An international market perspective.
g. Leadership.
h. Decision-making ability.

Apart from determining "Rules of Corporate Governance Practice," the Company has also explicitly specified that a candidate nominations system will be adopted for the election of directors (including independent directors). When selecting directors (including independent directors), the Company shall not only consider directors' (including independent directors') professional backgrounds, but shall also take diversity as an important factor. The Company has 9 directors (including 4 independent directors), of whom 1 director is a woman, which accounts for 11%. Members' professional backgrounds span the fields of management, science and engineering, accounting, and finance, and the board includes tech industry managers and professors of science, engineering, and accounting. Board members have diverse backgrounds in industry-academic cooperation, academics, and knowledge, and are able to provide professional views from different perspectives, which has greatly benefited the Company's operating performance and management efficiency.

(2)Specific management goals and state of implementation:

1.Specific management goals of the board diversity policy

(1) The Company's board values the gender equality of its members, and board members must include at least one female director.

(2) The Company's board also values operating judgment, operating management ability, leadership ability, and decision-making ability, and at least 2/3 of board members shall possess relevant core abilities.

(3) In order to achieve the goal of supervision, independent directors shall account for at least 1/3 of all board members.

2.State of diversification of board members:

(1) The Company has 9 directors (including 4 independent directors), of whom 1 director is a woman, which accounts for 11%.

(2) Relevant core abilities possessed by the Company's board members:

Name	Nationality/place of registration	Gender	Em ployees	Age			Term			skills, and qualities							
				51~ 60 Years old	61~ 70 Years old	Over 71 Years old	Less than 3 years	3-9 years	More than9 years	Operational judgment capability	Accounting and financial analysis capabilities.	Operation and management capabilities.	Crisis management capability	ndustry knowledge.	International market outlook	Leadership ability	Decision-making ability
Dye-Jyun Ma	Republic of China	Male	✓		✓					✓	✓	✓	✓	✓	✓	✓	✓
Shih-Chi Wang	Republic of China	Female	✓		✓					✓	✓	✓	✓	✓	✓	✓	✓
Ching-Hua Wang	Republic of China	Male				✓				✓	✓	✓	✓	✓	✓	✓	✓
Wei-Kang Teng	Republic of China	Male	✓		✓					✓	✓	✓	✓	✓	✓	✓	✓
Tzu-Hsiang Liu	Republic of China	Male	✓	✓						✓	✓	✓	✓	✓	✓	✓	✓
Chih-Hung Wen	Republic of China	Male			✓				✓	✓	✓	✓	✓	✓	✓	✓	✓
Chiang-Lin Chang	Republic of China	Male			✓			✓		✓	✓	✓	✓	✓	✓	✓	✓
Chia-Ying Ma	Republic of China	Male			✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
Wen-Hsiang Lu	Republic of China	Male			✓		✓			✓		✓	✓	✓	✓	✓	✓

(3) The Company has a total of 9 directors, of whom 4 are independent directors, and account for more than 1/3 of all directors; 1 independent director has served a term of over 9 years, 2 independent directors have served terms of over 3 years, and 1 director has served a term of less than 3 years; 1 director has an age of 51-60 years, 7 directors have ages of 61-70 years, and 1 director has an age of over 71 years.

(4) Of the directors, 44% have the status of employees.

2. Independence of the board of directors:

The Company's board of directors currently has 9 members, including 4 independent directors to ensure the board of directors' independence (accounting for 44%). Two of the directors are spouses. All independent directors comply with the regulations promulgated by the Securities and Futures Bureau, FSC. There is no relationship within the second degree of kinship between the directors, and there is no condition stipulated by Paragraphs 3 & 4, Article 26-3 of the Securities and Exchange Act.

(II) President, Vice Presidents, Associate Managers, and Supervisors of All the Company's Divisions and Branch Units:

Apr. 20, 2023; shareholding information as of March 27, 2023; unit: shares, %

Title	Nationality	Name	Gender	Date of taking office	Shareholding		Spouse & minor shareholding		Shareholding by nominees arrangement		Experience (education)	Other position concurrently held at the Company or other companies	Managers who are spouses or within the second degree of kinship			Remarks
					Number of shares	Shareholding ratio	Number of shares	Shareholding ratio	Number of shares	Shareholding ratio			Title	Name	Relation	
Chairman of the Board	Taiwan	Dye-Jyun Ma	Male	2010.06.04	2,804,747	3.11%	3,703,010	4.11%	–	–	PhD in Electrical Engineering, University of Maryland (United States) Professor and Dean, Department of Electrical Engineering, National Chung Hsing University Vice President, Richtek Technology Corp.	Director, Minerva Technology Co. (Belize) Director, Aegis Link Corp. (United States) Legal representative, Shenzhen YingHon Technology Corp.	President	Shih-Chi Wang	Spouse	Note 3
President	Taiwan	Shih-Chi Wang	Female	2004.03.01	3,703,010	4.11%	2,804,747	3.11%	–	–	PhD in Electrical Engineering, University of Maryland (United States) Associate Professor, Department of Electrical Engineering, Feng Chia University Director, Electronic Technology Research and Development Department, Winbond Electronics Corporation Senior Project Manager, Taiwan Semiconductor Manufacturing Company Assistant Vice President, Ali Corporation	None	Chairman of the Board	Dye-Jyun Ma	Spouse	Note 3
Senior Executive Vice President of R&D	Taiwan	Wei-Kang Teng	Male	2004.03.01	601,874	0.67%	127	0.00%	–	–	PhD in Electrical Engineering, National Taiwan University Technical Assistant Manager, National Chung-Shan Institute of Science & Technology Technical Assistant Manager, Taiwan Semiconductor Manufacturing Company Manager, R&D Department, Ali Corporation	Senior Vice President of R&D of the Company Chairman, Aegis Link Corp. (United States)	None	None	None	–
Vice President	Taiwan	Tzu-Hsiang Liu	Male	2004.03.01	562,210	0.64%	–	–	–	–	PhD in Electronics Engineering, National Chiao Tung University Section Chief, Electronic and Optoelectronic System Research Laboratories, Industrial Technology Research Institute Technical Assistant Manager, Taiwan Semiconductor Manufacturing Company Manager, R&D Department, Ali Corporation	None	None	None	None	–
Vice President	Taiwan	Chuan-Chen Chao	Female	2004.03.08	778,584	0.86%	–	–	–	–	PhD in Electronics Engineering, National Chiao Tung University Manager, Winbond Electronics Corp. Chief Engineer, Taiwan Semiconductor Manufacturing Company	None	None	None	None	–
Vice President of R&D	Taiwan	Hsiang-Feng Chi	Male	2015.11.09	162,631	0.18%	–	–	–	–	PhD in Electrical Engineering, University of California (United States) Senior Manager of Firmware Design, Synaptics Hong Kong Limited Director of DSP Design Department, Airoha Technology Corp. Director of Wireless Communication Design, ASMedia Technology Inc. Senior Manager/VLSI Design Structure Specialist, Afatech Assistant Professor, National Chiao Tung University IC Structure Specialist, GlobalspanVirata	None	None	None	None	–
Vice President of R&D	Taiwan	Chi-Fu Liang	Male	2020.06.01	–	–	–	–	–	–	PhD in Electrical Engineering, University of Maryland	None	None	None	None	–

Title	Nationality	Name	Gender	Date of taking office	Shareholding		Spouse & minor shareholding		Shareholding by nominees arrangement		Experience (education)	Other position concurrently held at the Company or other companies	Managers who are spouses or within the second degree of kinship			Remarks
					Number of shares	Shareholding ratio	Number of shares	Shareholding ratio	Number of shares	Shareholding ratio			Title	Name	Relation	
											Consultant, ASE Technology Holding Chief Communication Technology Officer, Jiangsu Pivotone Communication Technologies Incorporated FBAR Designer, Avago, San Jose, USA Technology Director, BenQ Corporation					
Vice President and Chief Financial Officer	Taiwan	Wei-Che Hsu	Male	2020.05.18	8,000	0.01%	–	–	–	–	Accounting Department, Feng Chia University Chief Financial Officer, Kayee-KY Financial Consultant, Sunplus Technology Co., Ltd. Deputy Director, Investment Administration Division, Giantplus Technology Co., Ltd. Deputy Manager, Underwriting Department, Grand Cathay Securities Corporation Auditor, Synmax Biochemical Co., Ltd.	None	None	None	None	–
Vice President of Sales Marketing	Taiwan	Chih-Chieh Huang	Male	2021.04.12	140	0.00%	–	–	–	–	Taipei University of Marine Technology / Department of Marine Engineering (Specialist) Director, Richwave Technology Corp. Technology and Marketing Manager, Richtek Technology Corp. Product Manager, Lanner Electronics Inc. Product Manager, DFI Inc.	None	None	None	None	–
Vice President of Operations	Taiwan	Hung-Shuo Chang	Male	2021.11.29	6,000	0.01%	–	–	–	–	Master's Degree from the Institute of Communication Engineering, Chiao Tung University President, Logos Electronics Inc. Vice President of Sales Marketing, Anax Technology Corp. Vice President of Operations and President of Taiwan Region, SmartIC Technology Co., Ltd. Vice President of Asia Pacific Marketing and President of Taiwan Region, Power Analog Microelectronics	None	None	None	None	–
Senior Assistant Vice President	Taiwan	Mei-Hui Lin	Female	2008.10.16	12,831	0.01%	–	–	–	–	Department of English, Wenzao Ursuline University of Languages Manager, Siliconix Electronic Co., Ltd. Vice President, Hanlin (Taiwan) Electronics Co., Ltd. Vice President, Magnesensor Technology	None	None	None	None	–
Chief Auditor	Taiwan	Pei-Chen Ho	Female	2013.08.08	–	–	–	–	–	–	Department of Industrial Design, Chaoyang University of Technology ISO lead auditor Quality Assurance Engineer, Syntronix Corporation Chief Auditor, Yang Hwa Technology Corporation	None	None	None	None	–

Note 1: The shareholding information described above does not include retained decision-making trust shares.

Note 2: Management is defined the same as the interpretation provided in the Ministry of Finance letter Tai-Cai-Zheng-San-Zi No. 0920001301 and includes the president, vice president, assistant vice president, chief financial officer and chief accounting officer (or equivalent officers).

Note 3: The Company's chairman and President are each other's spouses; the full new election during the 2022 shareholders meeting increased the number of independent directors to 4.

III Remuneration Paid During the Most Recent Fiscal Year to Directors, Independent Directors, Supervisors, President, and Vice Presidents

1. Remuneration to Directors and Independent Directors:

Remuneration information as of December 31, 2022; Unit: NT$ thousands

Title	Name	Directors' remuneration								Ratio of total remuneration (A+B+C+D) to net income (%)				Relevant remuneration 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 investee company other than the Company's subsidiaries or parent company
		Base Compensation (A)		Severance pay and pension (B)		Directors' compensation (C)		Business execution expenses (D)		Total		(A+B+C+D) as % of Net Income		Salary, bonuses, and allowances (E) (Note 1)		Severance pay and pension (F)		Employee compensation (G)				Total		(A+B+C+D+E+F+G) as % of Net Income		
																		The Company		All companies in the consolidated financial statements						
		The Company	All companies in the consolidated financial statements	The Company	All companies in the consolidated financial statements	The Company	All companies in the consolidated financial statements	The Company	All companies in the consolidated financial statements	The Company	All companies in the consolidated financial statements	The Company	All companies in the consolidated financial statements	The Company	All companies in the consolidated financial statements	The Company	All companies in the consolidated financial statements	Cash	Stock	Cash	Stock	The Company	All companies in the consolidated financial statements	The Company	All companies in the consolidated financial statements	
Director	Dye-Jyun Ma Shih-Chi Wang Wei-Kang Teng Ching-Hua Wang Tzu-Hsiang Liu	–	–	–	–	378	378	112	112	490	490	0.89%	0.89%	15,077	15,077	432	432	220	0	220	0	16,219	16,219	29.46%	29.46%	None
Independent Director	Chih-Hung Wen Chiang-Lin Chang Chia-Ying Ma Wen-Hsiang Lu	–	–	–	–	295	295	91	91	386	386	0.70%	0.70%	–	–	–	–	–	–	–	–	386	386	0.70%	0.7%	None

1. Please describe the policy, system, standards and structure of the compensation of the Independent Directors and explain the relevance of the amount of remuneration paid to them based on factors such as responsibility, risk and time commitment: The remuneration paid by the Company to Directors (including Independent Directors) is determined in accordance with the regulations in the Articles of Incorporation and is capped at 1% of the annual profits. However, when the Company still has accumulated loss, a certain amount of the earnings shall be retained for making up the loss and the remainder may be set aside as compensation for Directors. Article 21 of the Articles of Incorporation also states that the amount of compensation received by directors shall be determined by the Board of Directors according to the contribution of the individual and extent of involvement in the Company's operations, taking into account the prevailing rates in the domestic and international industry. In addition to the Company's operating performance, future risks, development strategies, and industry trends, the Remuneration Committee also regularly reviews remuneration policies, systems, standards, and structures. The Company will review the remuneration distribution policy from time to time based on the overall environment and the Company's business strategies to ensure both sustainability and the interests of stakeholders.
2. Except as otherwise disclosed herein, the directors of the Company have not received other remunerations for providing services (in a non-employee capacity, such as an advisor) to any of the companies in the consolidated financial statements within the fiscal year: None.

Note1: It means the salary, duty allowance, severance pay, bonus, reward, transportation allowance, special allowance, various allowances, and provision of such tangible objects as dormitory and car received by the Directors who acted as employees concurrently (including President, Vice Presidents, managers, and employees) in the most recent fiscal year.

Range of remuneration

Range of remuneration paid to directors	Names of directors			
	Total of (A+B+C+D)		Total of (A+B+C+D+E+F+G)	
	The Company	All companies in the consolidated financial statements H	The Company	All companies in the consolidated financial statements I
Less than NT$1,000,000	Dye-Jyun Ma, Shih-Chi Wang, Wei-Kang Teng, Tzu-Hsiang Liu, Ching-Hua Wang, Chih-Hung Wen, Chiang-Lin Chang, Chia-Ying Ma Wen-Hsiang Lu	Dye-Jyun Ma, Shih-Chi Wang, Wei-Kang Teng, Tzu-Hsiang Liu Ching-Hua Wang, Chih-Hung Wen, Chiang-Lin Chang, Chia-Ying Ma Wen-Hsiang Lu	Ching-Hua Wang, Chih-Hung Wen, Chiang-Lin Chang, Chia-Ying Ma Wen-Hsiang Lu	Ching-Hua Wang, Chih-Hung Wen, Chiang-Lin Chang, Chia-Ying Ma Wen-Hsiang Lu
NT$1,000,000 (inclusive) to NT$2,000,000 (exclusive)	—	—	—	—
NT$2,000,000 (inclusive) to NT$3,500,000 (exclusive)	—	—	Wei-Kang Teng	Wei-Kang Teng
NT$3,500,000 (inclusive) to NT$5,000,000 (exclusive)	—	—	Dye-Jyun Ma, Shih-Chi Wang, Tzu-Hsiang Liu	Dye-Jyun Ma, Shih-Chi Wang, Tzu-Hsiang Liu
NT$5,000,000 (inclusive) to NT$10,000,000 (exclusive)	—	—	—	—
NT$10,000,000 (inclusive) to NT$15,000,000 (exclusive)	—	—	—	—
NT$15,000,000 (inclusive) to NT$30,000,000 (exclusive)	—	—	—	—
NT$30,000,000 (inclusive) to NT$50,000,000 (exclusive)	—	—	—	—
NT$50,000,000 (inclusive) to NT$100,000,000 (exclusive)	—	—	—	—
Higher than NT$100,000,000	—	—	—	—
Total	9 individuals	9 individuals	9 individuals	9 individuals

2. Remuneration to supervisors

The Company established the Audit Committee to replace supervisors on May 24, 2019 in accordance with laws.

3. Remuneration to the President and Vice Presidents

Remuneration information as of December 31, 2022; Unit: NT$ thousands

Title	Name	Salary (A)		Severance pay and pension (B)		Bonuses and special allowances (C)		Employees' compensation from profit sharing (D)				Ratio of total remuneration (A+B+C+D) to net income (%)				Compensation paid to Directors from an investee company other than the Company's subsidiaries or parent company
		The Company	All companies in the consolidated financial statements	The Company	All companies in the consolidated financial statements	The Company	All companies in the consolidated financial statements	The Company		All companies in the consolidated financial statements		Total		(A+B+C+D) as % of Net Income		
								Cash	Stock	Cash	Stock	The Company	All companies in the consolidated financial statements	The Company	All companies in the consolidated financial statements	
Chairman of the Board	Dye-Jyun Ma	26,534	26,534	1,080	1,080	14,120	14,120	840	—	840	—	42,574	42,574	77.32%	77.32%	—
President	Shih-Chi Wang															
Senior Executive Vice President of R&D	Wei-Kang Teng															
Vice President	Tzu-Hsiang Liu															
Vice President	Chuan-Chen Chao															
Vice President of R&D	Hsiang-Feng Chi															
Vice President of R&D	Chi-Fu Liang															
Vice President and Chief Financial Officer	Wei-Che Hsu															
Vice President of Sales Marketing	Chih-Chieh Huang															
Vice President of Operations	Hung-Shuo Chang															

Note 1: The 2022 employee remuneration was passed in a resolution of the Board of Directors.

Range of remuneration

Range of remuneration paid to the President and Vice Presidents	Name of President and Vice Presidents	
	Total of (A+B+C+D)	
	The Company	All companies in the consolidated financial statements E
Less than NT$1,000,000	—	—
NT$1,000,000 (inclusive) to NT$2,000,000 (exclusive)	—	—
NT$2,000,000 (inclusive) to NT$3,500,000 (exclusive)	Wei-Kang Teng, Hung-Shuo Chang	Wei-Kang Teng, Hung-Shuo Chang
NT$3,500,000 (inclusive) to NT$5,000,000 (exclusive)	Dye-Jyun Ma, Shih-Chi Wang, Tzu-Hsiang Liu,Hsiang-Feng Chi, Chuan-Chen Chao, Wei-Che Hsu	Dye-Jyun Ma, Shih-Chi Wang,, Tzu-Hsiang Liu,Hsiang-Feng Chi, Chuan-Chen Chao Wei-Che Hsu
NT$5,000,000 (inclusive) to NT$10,000,000 (exclusive)	Chi-Fu Liang, Chih-Chieh Huang	Chi-Fu Liang, Chih-Chieh Huang
NT$10,000,000 (inclusive) to NT$15,000,000 (exclusive)	—	—
NT$15,000,000 (inclusive) to NT$30,000,000 (exclusive)	—	—
NT$30,000,000 (inclusive) to NT$50,000,000 (exclusive)	—	—
NT$50,000,000 (inclusive) to NT$100,000,000 (exclusive)	—	—
Higher than NT$100,000,000	—	—
Total	10 individuals	10 individuals

4. Name of managers to which employees' compensation is distributed and the status of distribution:

Unit: NT$ thousands

	Title	Name	Stock	Cash	Total	Ratio of total amount to net income (%)
Manager	Chairman of the Board	Dye-Jyun Ma	None	860	860	1.56%
	President	Shih-Chi Wang				
	Senior Executive Vice President of R&D	Wei-Kang Teng				
	Vice President	Tzu-Hsiang Liu				
	Vice President	Chuan-Chen Chao				
	Vice President of R&D	Hsiang-Feng Chi				
	Vice President of R&D	Chi-Fu Liang				
	Vice President and Chief Financial Officer	Wei-Che Hsu				
	Vice President of Sales Marketing	Chih-Chieh Huang				
	Vice President of Operations	Hung-Shuo Chang				
	Senior Assistant Vice President	Mei-Hui Lin				

Note 1: The 2022 employee remuneration was passed in a resolution of the Board of Directors.

(IV) Separate Comparisons and Descriptions of Total Remuneration, as a Percentage of Net Income Stated in the Parent Company-only Financial Reports or Individual Financial Reports, as Paid by the Company and All Other Companies Included in the Consolidated Financial Statements During the Past Two Fiscal Years to Directors, Supervisors, the President, and Vice Presidents, with Analysis and Description of Remuneration Policies, Standards, and Packages, Procedure for Determining Remuneration, and Linkage Thereof to Operating Performance and Future Risk Exposure:

1. Remuneration paid to Directors, President and Vice Presidents are paid by the Company. No other remuneration was paid by its affiliated companies.

2. The total remuneration as a percentage of net income paid by the Company and by all consolidated entities for the most recent 2 fiscal years to each of the Company's Directors, Supervisors, President, and Vice Presidents:

Title	2022		2021	
	The total remuneration as a percentage of net income paid to each of the Company's Directors, Supervisors, President, and Vice Presidents (%)		The total remuneration as a percentage of net income paid to each of the Company's Directors, Supervisors, President, and Vice Presidents (%)	
	Parent company only	Consolidated	Parent company only	Consolidated
Directors	1.59%	1.59%	1.26%	1.26%
Supervisors (Note 1)	—	—	—	—
President and Vice Presidents	77.32%	77.32%	9.74%	9.74%

Note 1: The Company established the Audit Committee to replace supervisors on May 24, 2019 in accordance with laws.

3. Remuneration policies, standards, and packages, procedure for determining remuneration to Directors, Supervisors, President and Vice Presidents, and linkage thereof to operating performance and future risk exposure:

A: Directors: The compensation for Directors refers to compensation distributed from earnings in accordance with Article 24 and 25 of the Company's Articles of Incorporation. No more than 1% of the profits shall be distributed as compensation for Directors which shall be distributed based on their involvement in the Company's business activities and the value of their contribution. If the Company has any net profit in the final accounts, the amount shall first be used to make up for deficits, allocation for statutory reserve or special reserve, distribution of dividends for special shares, and distribution of employees' compensation. The Board of Directors shall then consider the environment in the industry and the Company's capital requirements and formulate a plan for the distribution of earnings including compensation to Directors, and obtain the approval of the shareholders' meeting before distribution.

B. President and Vice Presidents: The compensation paid to the President and Vice Presidents includes salaries, incentive pay and employees' bonuses, and shall be determined based on their positions, responsibilities, the results of an annual performance appraisal and contribution to the Company as well as the prevailing rates in the industry.

C. Remuneration policies, standards, and packages, procedure for determining remuneration to Directors, Supervisors, President and Vice Presidents, and business performance are established based on prevailing rates in the industry. They are recommended by the Remuneration Committee and presented to the Board of Directors for passage.

IV. Implementation of Corporate Governance

(I) Operations of the Board of Directors

1. 7 meetings of the Board of Directors were held in the most recent year. The attendance of Directors was as follows:

Title	Name	Attendance in person	By Proxy	Attendance rate (%)	Note
Chairman	Dye-Jyun Ma	7	0	100 %	None
Director	Shih-Chi Wang	6	1	86 %	None
Director	Wei-Kang Teng	7	0	100%	None
Director	Ching-Hua Wang	7	0	100 %	None
Director	Tzu-Hsiang Liu	5	0	100 %	Note1
Independent Director	Chih-Hung Wen	7	0	100 %	None
Independent Director	Chiang-Lin Chang	7	0	100%	None
Independent Director	Chia-Ying Ma	7	0	100%	None
Independent Director	Wen-Hsiang Lu	5	0	100 %	Note1

Note1.: On May 26, 2022, the shareholders' meeting was held to re-elect new directors, and the number of meetings held since the date of election was two times.

Other matters:

I. With regard to the implementation of the Board of Directors, if any of the following circumstances occur, the dates, terms of the meetings, contents of motions, all independent directors' opinions and the Company's handling of such opinions shall be specified:

(I) A rticle 14-3 of the Securities and Exchange Act: The provisions provided by Article 14-3 are inapplicable since the Company has already established an audit committee. For items listed in Article 14-5 of the Securities and Exchange Act, please refer to Audit Committee Operation Status on pages 32-34 of this annual report.

(II) Any recorded or written Board resolutions to which independent directors have objections or reservations to be noted in addition to the above:None.

II. Regarding recusals of directors from voting due to conflicts of interests, the names of the directors, contents of motions, reasons for recusal, and results of voting shall be specified: The Company's Directors recused themselves from proposals involving conflicts of interest.

Date Meeting Resolutions	Name	Agenda	Reason of recusals	Vote
2022/02/24	Dye-Jyun Ma, Shih-Chi Wang, Wei-Kang Teng	1. The Company’s 2021 employee and director remunera-tion distribution proposal. 2. The Company’s 2021 manager dividend proposal.	The managers of the Company	Did not participated
2022/04/28	Dye-Jyun Ma, Shih-Chi Wang, Wei-Kang Teng	1. The company's 2022 year manager award case. 2. Passed the Company’s manager annual salary adjustment and manager promotion proposal..	The managers of the Company	Did not participated
2022/07/28	Dye-Jyun Ma, Shih-Chi Wang, Wei-Kang Teng, Tzu-Hsiang Liu	1. Review the insider of cash capital increase employee stock option allocation. 2. The company's 2022 manager incentive plan.	The managers of the Company	Did not participated
2022/12/22	Dye-Jyun Ma, Shih-Chi Wang, Wei-Kang Teng, Tzu-Hsiang Liu	1. The company's 2022 manager incentive plan.	The managers of the Company	Did not participated

III. The company listed on TWSE/TPEx shall disclose the evaluation cycle and duration, scope of evaluation, methodology, and evaluation contents of the self (or peer) evaluation of the Board of Directors:

Frequency	Period	Scope	Method	Content
Once a year	Jan. 1, 2022 to Dec. 31, 2022	Performance evaluation of the Board of Directors and functional committees.	The performance evaluation is conducted through internal questionnaires and includes the overall operations of Directors and functional committees, participation in board meetings, understanding of the company and awareness of responsibilities, continuing education, etc.	1. Board performance evaluation: (1) Level of participation in Company operations. (2) Improvement of the quality of board decisions. (3) Composition and structure of the Board of Directors. (4) Election and continuing education of the Directors. (5) Internal control The evaluation results were excellent. 2. Board member performance evaluation: (1) Familiarity with the goals and missions of the Company. (2) Awareness of the duties of a Director.

Frequency	Period	Scope	Method	Content
				(3) Level of participation in Company operations. (4) Management of internal relations and communication. (5) The Director's professionalism and continuing education. (6) Internal control. The evaluation results were excellent. 3. Performance evaluation of functional committees (1) Level of participation in Company operations. (2) Knowledge of the duties of the functional committee. (3) Improvement of the quality of the functional committee's decisions. (4) Functional committee composition and election of members. (5) Internal control. The evaluation results were excellent.

IV. Measures undertaken during the current year and past year in order to strengthen the functions of the board of directors (such as the establishment of an audit committee and improvement of information transparency, etc.) and assessment of their implementation:

(I) The Company has established the "Ethical Corporate Management Best Practice Operating Procedures and Code of Conduct" and uploaded it to the Market Observation Post System and Company's website for reference by stakeholders to implement ethical corporate management.

(II) The Company organizes continuing education of Directors each year to continue to provide them with access to new knowledge and maintain their core value, professional advantages, and skills.

(III) The Company has set up an investors' section on the Company website and uses the Internet to provide investors with information of interest to them.

(IV) The Company established the Audit Committee to replace supervisors on May 24, 2019 to strengthen the performance of the duties of the Board of Directors.

(II) Operation of the Audit Committee or Supervisors' involvement in the operation of the Board of Directors:

1. Operations of the Audit Committee:

The Audit Committee convened 5 meetings in the most recent year(2022.01.01~2022.12.31). The attendance of Independent Directors was as follows:

Title	Name	Attendance in person	By Proxy	Attendance rate (%)	Remarks
Independent Director	Chih-Hung Wen	5	0	100%	None
Independent Director	Chiang-Lin Chang	5	0	100%	None

Title	Name	Attendance in person	By Proxy	Attendance rate (%)	Remarks
Independent Director	Chia-Ying Ma	5	0	100%	None
Independent Director	Wen-Hsiang Lu	3	0	100%	Note1

Note1.:On May 26, 2022, the shareholders' meeting was held to re-elect new directors, and the number of meetings held since the date of election was three times.

Other matters:

I. With regard to the implementation of the Audit Committee, if any of the following circumstances occur, the dates, terms of the meetings, contents of motions, all Audit Committee resolutions, and the Company's handling of such resolutions shall be specified:

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

Date	Motion		Opinions of all Independent Directors and the Company's handling of opinions of Independent Directors
2022/02/24	1	The Company's 2021 annual business report and financial statement proposal.	Approved by all Independent Directors
	2	The Company's 2021 earnings distribution proposal.	
	3	The Company's "2021 Statement of Internal Control System" proposal.	
	4	The Company's 2022 CPA appointment proposal.	
2022/04/28	1	The Company's CPA independence assessment proposal.	
	2	The Company's 2022 1st quarter consolidated financial statement proposal.	
	3	The Company's 2022 cash capital increase through the issuance of new shares and issuance of first domestic unsecured convertible corporate bonds	
2022/07/28	1	The Company's 2022 2nd quarter consolidated financial report proposal.	
2022/10/27	1	The Company's 2022 3rd quarter consolidated financial statement proposal.	
	2	Amendment of the "Internal control system".	
2022/12/22	1	The Company's 2023 "Internal Audit Plan" proposal.	
	2	Adjustment of inter-company investment structure.	

(II) Other matters which were not approved by the Audit Committee but were approved by two-thirds or more of all Directors: None.

II. Regarding recusals of independent directors from voting due to conflicts of interests, the names of the independent directors, contents of motions, reasons for recusal, and results of voting shall be specified: None.

III. Communication between independent directors, internal chief audit officer and CPAs (which should include the important matters, methods, and results regarding the Company's finance and operations):

(I) The Company's internal audit unit sends the monthly "Audit Report" by mail to each Independent Director for review within the prescribed period. It also attends the quarterly meetings of the Audit Committee for the "Audit Progress Report", which includes explanations of audit operations, audit results, and follow-ups for improvement. If there are questions or instructions, Independent Directors can consult the audit supervisor in the meeting.

(II) The Company's CPA reports the results of the review or audit of the Company's financial statements, internal control audits, the impact of amendments and announcements of auditing standards on the Company, and other legal requirements. The CPA also communicates with them on whether any adjustment of the financial statements or amendments of laws and regulations affect the presentation of the accounts.

(III) The audit supervisor may engage in direct communication with the CPA and Independent Directors at any time and the communication channels remain open.

(IV) The internal audit supervisor regularly reports the implementation status of the audits to the Independent Director in the Audit Committee each quarter. The contents are summarized below:

Date	Report and communication contents	Results
2022/02/24	Report on the implementation status of internal audits for 2021 Q4.	Fully discussed and acknowledged.
2022/04/28	Report on the implementation status of internal audits for 2022 Q1.	Fully discussed and acknowledged.
2022/07/28	Report on the implementation status of internal audits for 2022 Q2.	Fully discussed and acknowledged.
2022/10/27	Report on the implementation status of internal audits for 2022 Q3.	Fully discussed and acknowledged.
2022/12/22	The Company's 2023 "Internal Audit Plan"	Fully discussed and acknowledged.

(V) The CPA shall report the audit of the financial report to Independent Director at least once every year and explain and discuss the contents and progress of the audit.

The communication is summarized below:

Date	Report and communication contents	Results
2022/02/24	Report on the results of the audit of the 2021 individual and consolidated financial statements and the audit of the internal control system.	Fully discussed and acknowledged.
2022/04/28	Audit report for the consolidated financial statements for 2022 Q1.	Fully discussed and acknowledged.
2022/07/28	Audit report for the consolidated financial statements for 2022 Q2.	Fully discussed and acknowledged.
2022/10/27	Audit report for the consolidated financial statements for 2022 Q3.	Fully discussed and acknowledged.

2. Participation of Supervisors in the operations of the Board of Directors: The Company established the Audit Committee to replace supervisors on May 24, 2019 in accordance with laws.

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

Evaluation item	Implementation status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
I. Does the Company establish and disclose its Corporate Governance Best-Practice Principles based on the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies?	✓		The Board of Directors of the Company established the "Corporate Governance Best Practice Principles" on Feb. 8, 2017 in accordance with the "Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies" and announced it on the Company's website (www.richwave.com.tw) under "Investors" - "Corporate Governance".	None
II. Shareholding structure & shareholders' rights (I) Does the Company establish internal operating procedures to deal with shareholders' suggestions, doubts, disputes and litigations, and does the Company implement the procedures in accordance with the procedure? (II) Does the Company possess a list of its major shareholders with controlling power as well as the ultimate owners of those major shareholders? (III) Does the Company establish and execute a risk management and firewall system within its affiliated companies? (IV)Does the Company establish internal rules against insiders using undisclosed information to trade with?	✓ ✓ ✓ ✓		(I) The Company has appointed a spokesperson, acting spokesperson, and other dedicated personnel. We also set up an investor email to process shareholders' recommendations, questions, disputes, and litigation. (II) The Company discloses the list of major shareholders and the ultimate controllers of major shareholders in accordance with regulations and maintains smooth communication channels with major shareholders. (III) The Company has established related mechanisms in the internal control system in accordance with regulations. Business and financial dealings between the Company and an affiliate are treated as dealings with an independent third party, which are processed based on the principles of fairness and reasonableness with established rules to clearly define pricing and payment terms and prevent non-arm's-length transactions. (IV) The Company has established the "Procedures for Handling Material Inside Information" to prevent insiders from engaging in insider trading by mistake and violate laws.	None
III. Composition and responsibilities of the Board of Directors (I) Does the Board of Directors develop and implement a policy to promote diversity in the composition of its members?	✓		(I)Board of Directors Member Diversity Policy and Objectives: 1.Board Diversity: (1)Policy on diversification of board members:	None

Evaluation item	Implementation status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
			In accordance with Chapter 3, Article 20 of this Company's "Rules of Corporate Governance Practice," requirements for strengthening the board's functions call for diversity to be considered when determining the board's composition. In view of Company's functioning, operating format, and development needs, the diversity policy drafted by this Company should include, but not be limited to, the standards in the following two major areas: a.Basic requirements and values: Gender, age, nationality, and culture. b.Professional knowledge and expertise: A professional background (e.g., law, accounting, industry, finance, marketing, or technology), professional skills, and industry experience. Board members shall be equipped with knowledge, skills, and attainments generally required for performing their tasks. In order to accomplish the preferred governance goals of the Company, the Board of Directors shall generally be equipped with the following capabilities: a.Ability to make sound business judgments. b.Ability to perform accounting and financial analysis. c.Ability to manage a business. d.Ability to handle crisis management. e.Industrial knowledge. f.An international market perspective. g.Leadership. h.Decision-making ability. Apart from determining "Rules of Corporate Governance Practice," the Company has also explicitly specified that a candidate nominations system will be adopted for the election of directors (including independent directors). When selecting directors (including independent directors), the Company shall not only consider directors' (including independent directors') professional backgrounds, but shall also take diversity as an important factor. The Company has 9 directors (including 4 independent directors), of whom 1 director is a woman, which accounts for 11%. Members' professional backgrounds span the fields of management, science and engineering, accounting, and finance, and the board includes tech industry managers and professors of science, engi-	

Evaluation item	Implementation status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
			neering, and accounting. Board members have diverse backgrounds in industry-academic cooperation, academics, and knowledge, and are able to provide professional views from different perspectives, which has greatly benefited the Company's operating performance and management efficiency. 2.Specific management goals and state of implementation: (1)Specific management goals of the board diversity policy a.The Company's board values the gender equality of its members, and board members must include at least one female director. The Company's board also values operating judgment, operating management ability, leadership ability, and decision-making ability, and at least 2/3 of board members shall possess relevant core abilities. b.In order to achieve the goal of supervision, independent directors shall account for at least 1/3 of all board members. (2)State of diversification of board members: a.The Company has 9 directors (including 4 independent directors), of whom 1 director is a woman, which accounts for 11%. b. Relevant core abilities possessed by the Company's board members: c.The Company has a total of 9 directors, of whom 4 are independent directors, and account for more than 1/3 of all directors; 1 independent director has served a term of over 9 years, 2 independent directors have served terms of over 3 years, and 1 director has served a term of less than 3 years; 1 director has an age of 51-60 years, 7 directors have ages of 61-70 years, and 1 director has an age of over 71 years. d. Of the directors, 44% have the status of employees.	
(II) In addition to the legally-required Remuneration Committee and Audit Committee, does the Company voluntarily establish other functional committees?		✓	(II) The Company has established the Remuneration Committee and the Audit Committee and appointed 3 Independent Directors to serve as committee members. We respect all constructive opinions of the committee members and we currently have no plans to establish other functional committees.	The Company has not established other functional committees.
(III) Does the Company establish standards to measure the performance of the Board of Directors and implement such annually? Does the Company submit results of	✓		(III) The company has established standards to measure the performance of the Board of Directors and evaluates the performance of the Board of Directors every year.	None

Evaluation item	Implementation status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
assessments to the Board of directors and use results as the basis for the salary, remuneration, nomination and reappointment of individual Directors? (IV) Does the Company regularly evaluate the independence of the CPAs?	✓		(IV) The Company assesses the independence and competence of the CPA it has engaged at least once each year in light of its rules of corporate governance practice and audit quality indicators (AQIs). Assessment items include confirming that the CPA and spouse or dependent relatives do not serve as the Company's directors or supervisors, managers, or other employees with a direct and significant impact on audit work, the engaged CPA has not borrowed money from the Company, and the same CPA has not performed attestation services for more than seven years; a statement attesting to the CPA's independence is obtained, and the results of assessment are submitted to the board.	None
IV. Does the Company establish a dedicated (or non-dedicated) corporate governance unit or appoint personnel responsible for corporate governance matters (including but not limited to providing information for directors and supervisors to perform their functions, handling matters related to Board meetings and shareholders' meetings according to the law, handling company registration and changes to company registration, and producing minutes of the Board meetings and shareholders' meetings)?	✓		The Company's part-time unit that promotes corporate sustainability is the Global Affairs Office. The unit's executive is in charge of the Company's sustainability and ESG matters. In 2022, the Office added a product R&D working group to its original six working groups on corporate governance, customer care, supplier cooperation, environmental sustainability, employee care, and social care. Team members are representatives from various departments, including talented professionals with diverse backgrounds, expertise, and experience, who regularly report to the board on the results of sustainability promotion.	None
V. Does the Company establish communication channels and build a dedicated section on its website for stakeholders (including but not limited to shareholders, employees, customers, and suppliers) to respond to material corporate social responsibility issues in a proper manner?	✓		The Company has set up an email on the Company's website to maintain a smooth communication channel. We also assigned dedicated personnel to respond appropriately to important CSR issues of concern to shareholders, creditors, bondholders, employees, customers, the management, society, or government.	None
VI. Does the Company appoint a professional shareholder service agency to deal with shareholder affairs?	✓		The Company has appointed a professional shareholder service agency to deal with shareholder affairs.	None

Evaluation item	Implementation status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
VII. Information disclosure (I) Does the Company have a corporate website to disclose both the Company's financial standing and corporate governance status? (II) Does the company have other information disclosure channels (e.g., setting up an English website, appointing designated people to handle information collection and disclosure, creating a spokesman system, and webcasting investor conferences)? (III) 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 ahead of schedule before the specified deadline?	 ✓ ✓ ✓		 (I) The Company has a website to disclose its financial, business and corporate governance information both in Chinese and English. (II) The Company has a website both in Chinese and English, and has designated the Investor Relations Department being responsible to fullfill a spokesman system in collecting and disclosing the relevant information according to regulations, and participate the Investor Conferences sponsored by other organizations on an irregular basis. The Company holds the Investor Conference on a quarterly basis, and will disclose its relevant information both on the Market Observation Post System and the Company's official website. (III) The Company has published and reported its annual financial report within two months after the end of a fiscal year, and has published and reported its financial reports for the first, second and third quarters ahead of schedule before the specified deadline.	None
VIII. Is there any other important information to facilitate a better understanding of the Company's corporate governance practices (including but not limited to employee rights, employee wellness, investor relations, supplier relations, stakeholder rights, directors' and supervisors' training records, implementation of risk management policies and risk evaluation measures, implementation of customer policies, and participation in liability insurance by directors and supervisors)?	✓		GM is the convener of the Company's Sustainability Development Project to promote the Sustainability Development Policy, Worldwide Logistics Office will be the part-time unit to be responsible in promoting Corporate Sustainability ESG related affairs. 1. The Company implements policies for employee rights and benefits in accordance with relevant laws and regulations. We also established the Employee Welfare Committee to provide various welfare measures. 2. The Company's department supervisors hold meetings from time to time to establish communication channels between the management and employees. The Management Department keeps track of employees' attendance status to provide timely assistance and care in case of emergencies. 3. The Company provides sufficient information on the Market Observation Post System in a timely manner. Investors can express their opinions by telephone, email, or other methods.	None

Evaluation item	Implementation status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
			4. The Company operates with clear division of work functions in each department and the communication with stakeholders is assigned to related departments which upholds the principles of integrity and fairness to protect the rights of stakeholders 5. The Directors attend the required training programs from time to time to enhance their professional knowledge. 6. The Company engages in business activities in accordance with its internal control system. The Company also requires certian amount of the collateral from different customers to minimize the business risks borne by the Company. 7. The Company has established a certain level of trust with customers in all channels through long-term partnerships, and has therefore implemented sound customer policies. 8. Except for special circumstances, all Directors have attended all meetings of the Board of Directors and fully discussed and communicated with each other. We also record meeting proceedings in accordance with the "Rules of Procedure for Board of Directors Meetings". Where there is a motion in which a Director has a conflict of interest, the Director is required to recuse himself/herself in accordance with regulations. No Director has a conflict of interest with the finance and business operations of the Company.	

IX. Please explain the improvements made in accordance with the Corporate Governance Evaluation results released by the Taiwan Stock Exchange’s Corporate Governance Center, and provide the priorities and plans for improvement with items yet to be improved:

The Company's corporate governance evaluation results were improved compared to the previous year and related announcements in English have been implemented in 2021

(I) The Company has added the “Corporate Sustainability”/”ESG” section on the Company’s website and disclosed the following subjects:

1. Organization and Management: (1) Corporate Sustainability Unit and Materiality Analysis (2) Ethical Corporate Management (3) Risk Management (4) Information Security (5) Creativity Management.

2. Environment: (1) Environmental Goals and Climate Change (2) Environmental Data (3) Supplier Management Policy

3. Social: (1) Communication with Stakeholders (2) Human Rights (3) Employee Welfare, Benefits and Retirement System (4) Occupational Safety Management (5) Program and Promotion Performance

(II) The Company initiates the Corporate Sustainability (ESG) Report proactively from 2022.

(IV) Composition, Duties and Operation of the Remuneration Committee:

1. Professional Qualifications and Independence Analysis of Remuneration Committee Members:

Conditions / Name / Identity		Professional qualifications and experience	Independent status	Number of other public companies in which the individual is concurrently serveing as the Remuneration Committee member
Convenor and independent director	Chiang-Lin Chang	See "Disclosure of information as professional qualifications and independent status of directors and independent directors" on page 16~19		0
Independent director	Chih-Hung Wen			0
Independent director	Chia-Ying Ma			3
Independent director	Wen-Hsiang Lu			0

2. Operations of the Remuneration Committee:

(1) The Company's Remuneration Committee consists of 3 members.

(2) Term of office: May 25, 2022 to May 24, 2025. Four meetings (A) of the Remuneration Committee were convened in the most recent fiscal year (2022) and the qualifications and attendance of the members are as follows:

Title	Name	Number of actual attendance (B)	Number of attendance by proxy	Attendance rate (%) [B/A] (Note)	Remarks
Convener/chair	Chiang-Lin Chang	4	0	100%	None
Committee Member	Chih-Hung Wen	4	0	100%	None
Committee Member	Chia-Ying Ma	4	0	100%	None
Committee Member	Wen-Hsiang Lu	2	0	100%	Note2

Note1: The actual attendance rate is calculated using the number of meetings of the Remuneration Committee and the actual attendance during the term of service.

Note2.: On May 26, 2022, the shareholders' meeting was held to re-elect new directors, and the number of meetings held since the date of election was two times.

Other matters:

I. If the Board of Directors refuses to adopt or amend a recommendation of the remuneration committee, the date of the meeting, session, content of the motion, resolution by the board of directors, and the Company's response to the remuneration committee's opinion (e.g., if the remuneration passed by the Board of Directors exceeds the recommendation of the remuneration committee, the circumstances and cause for the difference shall be specified) shall be specified: None.

II. If there were resolutions of the remuneration committee to which members objected or expressed reservations, and for which there is a record or declaration in writing, the date of the meeting, session, content of the motion, all members' opinions and the response to members' opinion shall be specified: None.

III. Discussions and results of resolutions of the Remuneration Committee and the Company's response to the opinions of the members:

Date	Agenda	Resolution Result	Handling of Remuneration Committee's Resolutions by the Company
2022/02/24	1.Proposal for the distribution of the remuneration to employees and Directors for 2021. 2.Passed the 2021 managerial officer bonus distribution proposal.	Agreed and Passed by All Members of the Committee	None
2022/04/28	1. Passed the 2022 special bonus for the managerial officer. 2. Passed the Company's manager promotion and annual salary adjustment proposal.	Agreed and Passed by All Members of the Committee	None
2022/07/28	1. Appointment of the current committee chairman and convener. 2. approved the review of the insider case of employee stock option allocation for cash capital increase. 3. Passed the 2022 special bonus for the managerial officer	Agreed and Passed by All Members of the Committee	None
2022/12/22	1. Passed the 2022 special bonus for the managerial officer	Agreed and Passed by All Members of the Committee	None

(V) The deviations and reasons for the Company’s Governance Implementation Status vs the Best Practice Principles of Sustainable Development required for listed companies byTaiwan Stock Exchange (TWSE) and Taipei Exchange (TPEx)

Promotion item	Implementation Status			The Deviations and Reasons against the Best Practice Principles of Sustainable Development for listed companies of TWSE and TPEx
	Yes	No	Description	
I. Has the Company established an exclusively (or concurrently) dedicated unit to be in charge of the governance structure for sustainable development initiatives? Has the board of directors appoint executive-level positions to handle relevant matters, and to report the status of the handling to the board of directors?	✓		1. 2022, the Office added a product R&D working group to its original six working groups on corporate governance, customer care, supplier cooperation, environmental sustainability, employee care, and social care. Team members are representatives from various departments, including talented professionals with diverse backgrounds, expertise, and experience, and regularly report to the board on the results of sustainability promotion. On December 22, 2022, the Office reported to the board concerning the state of implementation of the Company's sustainability project, and this was approved by the directors. 2. In 2022, the various working groups complied with the work goals and plans for 2022 in keeping with the corporate sustainability policy, systems, and management strategies approved by the board. The general manager led various relevant departmental managers in jointly cooperation with the implementation of sustainability plans, and in participating in the various programs and activities drafted by the sustainability task force. The Office will continue to review implementation progress toward short-term, mid-term, and long-term sustainability goals.	None
II. Has the Company conduct risk assessments of environmental, social and corporate governance issues pertaining to company operations in	✓		1. Risk assessment boundaries chiefly encompass the Company, but will be expanded to encompass subsidiaries. 2. Assessments of risks in environmental, social, and corporate governance issues relevant to the Company's business activities, and determination of risk management policies and strategies:	None

<table>
<tr><th rowspan="2">Promotion item</th><th colspan="3">Implementation Status</th><th>The Deviations and Reasons against the Best Practice Principles of Sustainable Development for listed companies of TWSE and TPEx</th></tr>
<tr><th>Yes</th><th>No</th><th>Description</th><th></th></tr>
<tr><td>accordance with the materiality principle, and establish the relevant risk management policy or strategy?</td><td></td><td></td><td>
<table>
<tr><th>Major issues</th><th>Evaluation content</th><th>Risk Management Policy or Strategy</th></tr>
<tr><td>Environment</td><td>Energy management</td><td>Understand and inventory the electricity consumption and carbon emissions of operating bases, and seek future opportunities for carbon reduction Completion of ISO14001 and ISO14064-1 certification in 2022</td></tr>
<tr><td rowspan="2">Society</td><td>Product and customer relations: Customer health and safety, marketing, and labeling</td><td>Improve hazardous substance management and comply with RoHS and WEEE compliance regulations through supply chain management</td></tr>
<tr><td>Innovation Management</td><td>In order to strengthen the Company’s innovation capability and product competitiveness, and to protect the Company’s advanced technological achievements, the Company develops patents that need to be achieved each year and the number of certifications to obtain, and then encourage employees in all R&D units to achieve the goals.</td></tr>
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<table>
<tr><th>Major issues</th><th>Evaluation content</th><th>Risk Management Policy or Strategy</th></tr>
<tr><td rowspan="2">Society</td><td>Customer relationship management</td><td>Conduct regular customer satisfaction surveys, rolling amendments of relevant issues, and maintain good customer relationships.</td></tr>
<tr><td>Customer privacy</td><td>Protect security of customers’ private data through implementation of information security management.</td></tr>
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</td><td></td></tr>
</table>

<table>
<tr><th rowspan="2">Promotion item</th><th colspan="3">Implementation Status</th><th>The Deviations and Reasons against the Best Practice Principles of Sustainable Development for listed companies of TWSE and TPEx</th></tr>
<tr><th>Yes</th><th>No</th><th>Description</th><th></th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td rowspan="3">Corporate Governance</td><td>Ethical Corporate Management</td><td>● The Board of Directors has established the "Ethical Corporate Management Operating Procedures and Code of Conduct" and promotes the promotion and implementation of ethical corporate management.
● Education and training courses are provided to enhance employees’ awareness of legal compliance in order to ensure that Company employees are cognizant of standards and maintain the order of competition.</td></tr>
<tr><td>Risk management</td><td>It has established a cross-unit business continuity planning (BCP) team. With the aim of preventing potential major risk incidents from harming the Company, the BCP team conducts rigorous risk assessments, formulates response strategies, arranges emergency response measures, conducts irregular drills, and continues to improve with respect to the major risks that the Company may encounter.</td></tr>
<tr><td>Supplier management</td><td>● Implement supply chain management procedures and require suppliers to comply with regulations:
■ International quality certifications, such as ISO 9001/ISO 14001/ ISO 45001/QC 080000/IATF 16949/safety standard certification
● Complete Hazardous Substance-Free (HSF) declaration, and provide material hazardous substances test reports, safety data sheets (SDS), and HSF compliance declarations
■ Complete conflict minerals reporting templates (CMRT/EMRT)
■ Provide quality and reliability reports</td></tr>
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</td><td></td></tr>
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Promotion item	Implementation Status			The Deviations and Reasons against the Best Practice Principles of Sustainable Development for listed companies of TWSE and TPEx
	Yes	No	Description	
III. Environmental Issues (I) Has the Company established proper environment management systems based on the characteristics of their industries?	✓		The Company has long been concerned about environmental protection, strives to ensure that corporate operations are in harmony with the environment, and has introduced electronics products offering excellent performance and incorporating green thinking. Because of this, while implementing environmental management policies and adequately controlling the environmental impact of the Company's operations, we are also actively promoting supply chain environmental management, and supervising and guiding our supply chain partners in fulfilling their environmental sustainability responsibilities, while jointly creating a green value chain for semiconductors. The Company has received ISO 9001: 2015 certification, and has received Sony's GP (Green Partner) and Samsung's Eco-Partner certification. At the end of 2022, Richwave Technology Corp. had passed ISO 14001: 2015 environment management system certification and ISO 14064-1: 2018 greenhouse gas inventory and certification, relied on the establishment of an effective environmental management mechanism to reduce consumption of environmental resources and energy during the operating process, make progress toward corporate sustainable management improvement goals, and satisfy customers' and the public's green operation expectations.	None
(II) Has the Company endeavor to utilize all resources more efficiently and use renewable materials which have a low impact on the environment?	✓		As a member of the IC R&D and design industry, the Company's energy consumption chiefly relies on externally purchased power, and we have no high energy consumption heating equipment or production processes. In order to implement effective energy management and monitor our energy consumption, we regularly compile power use statistics, which provide a basis for continued improvement. The Company made external purchases of 3745.2 GJ of power in 2022, which represented a reduction of 0.7% compared with the year before. This decrease can chiefly be attributed to the Company's implementation of an energy conservation policy and rearrangement of spaces in use, as well as changes in the number of employees working from home due to Covid. With regard to energy use intensity, The Company had a energy use intensity (EUI) of 198.7	None

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<tr><td></td><td></td><td></td><td>kWh/m2 in 2022, which was a decrease of 5.8% compared with the previous year. This shows that apart from its vigorous disease prevention efforts, Richwave Technology Corp. has also continued to implement energy conservation measures geared to raising energy use efficiency and realizing green sustainability.</td><td></td></tr>
<tr><td>(III) Has the Company assessed the current and future potential risks and opportunities that climate change may present to enterprises and to adopt climate related measures?</td><td>✓</td><td></td><td>In the wake of the Paris Agreement, climate change has become an issue of great concern for governments and companies around the world. In particular, extreme climate and changes in greenhouse gas emissions laws and regulations may both have significant impacts on corporate operations and human welfare. In order to cope with these changes, Richwave Technology has continued to strengthen climate adaptation and resilience, and has preliminarily identified the following climate-related risks and opportunities that may cause financial impact, and has developed relevant response strategies for each.

Climate-related risks and opportunities and response strategies
<table>
<tr><th>Risk/opportunity type</th><th>Explanation of climate risks and opportunities</th><th>Potential financial impact</th><th>Response strategies</th><th>Annual actions</th></tr>
<tr><td rowspan="2">Physical risks</td><td>Immediate risks: Drought or typhoon caused by extreme climate</td><td>Direct or indirect interruption of operations or financial losses.</td><td rowspan="2">1. Regular assessment of the Company's internal risks, drafting and implementation of risk mitigation measures.
2. Establishment of emergency response procedures and implementation of regular drills
3. Regular implementation of supply chain</td><td rowspan="2">1. Internal risk assessment was implemented in Q4 2022, and assessment results were submitted to the board in February 2023.
2. Drills were conducted in June and October of 2022.
3. Supplier-end BCP activities have continued in the form of ques-</td></tr>
<tr><td>Long-term risks: Persistent heat waves caused by continuing high temperatures</td><td>Increased operating expenses due to increases in power use</td></tr>
</table></td><td>None</td></tr>
</table>

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<tr><td></td><td></td><td></td><td>audits and issuance of recommendations for improvement.</td><td>tionnaires & confirmation of annual audit implementation.</td></tr>
<tr><td rowspan="2">Transition risks</td><td>Policies, laws, and regulations</td><td>A carbon pricing mechanism instituted by government increases operating costs</td><td rowspan="2">Short-term strategies: Annual drafting and implementation of energy conservation and carbon emissions reduction plans and continued green procurement.

Mid-term strategies: Adoption of a TCFD program, establishment of an effective climate change risk and opportunity identification system

Long-term strategies: Drafting of strategies to reduce climate change risk, and management mechanisms to sustain operations.</td><td rowspan="2">1. 1Passed ISO 14001 and ISO 14064-1 certification in 2022, and systematically implemented environmental management and greenhouse gas emissions controls.
2. Reduced power use by 79,735 kWh in 2022; reduced greenhouse gas emissions by 4.0585 tCO2e.
3. Continued to implement supply chain management procedures and require suppliers to comply with regulations: Received ISO 9001/ISO 14001/ ISO14064-1 international environment certifications.</td></tr>
<tr><td>Markets</td><td>The rising cost of raw materials and components and changes in customer behavior have affected input costs (such as outsourcing costs, inventory management, and energy) and changes in output demand (such as inventory write-off, waste handling expenses) have caused production and operating costs to</td></tr>
</table>
</td><td></td></tr>
</table>

Promotion item	Implementation Status			The Deviations and Reasons against the Best Practice Principles of Sustainable Development for listed companies of TWSE and TPEx
	Yes	No	Description	

		rise.		
	Technology	In order to meet international standard and customers' demand for low-carbon products, the Company has continued to invest in R&D, design, and product manufacturing, which has caused relevant costs, including both manpower and materials costs, to increase.	Short-term strategies: Meet customers' needs, provide solutions. Mid-/long-term strategies: Continued reliance on green, innovative R&D and design to boost chip performance and reduce energy consumption; requiring that all of the Company's outsourced service providers comply with international sustainable developmental goals for 2030 and net zero emissions targets for 2050.	Estimates based on shipment volume in 2022 indicate that the Company reduced carbon dioxide emissions by approximately 4 tons, and estimates based on projected shipment volume in 2023 suggests that it can reduce carbon dioxide emissions by 37 tons.
	Reputation	Cannot satisfy stakeholders' net zero carbon emissions expectations, causing damage to the company's reputation, affecting		

Promotion item	Implementation Status			The Deviations and Reasons against the Best Practice Principles of Sustainable Development for listed companies of TWSE and TPEx
	Yes	No	Description	
			(nested tables below)	

		customers willingness to place orders, and potentially causing operating losses.		

Risk/opportunity type	Explanation of climate risks and opportunities	Potential financial impact	Response strategies/actions	Annual actions
Opportunities	Resource use efficiency	Reduce energy/resources usage and increase the recycling and reuse rate, reduce operating costs.	Short-term strategies: Use of various energy conservation programs, recycling of product packaging, and supplier management Mid-/long-term strategies: Continued greenhouse gas inventories, active planning and participation in carbon trading markets and use of renewable energy. To facilitate tracking and review, continued annual requirement that all suppliers submit short-term 2025 and midterm	1. Installed 638 LED energy-conserving lamps as replacements in 2022, which can reduce power consumption by 45,781 kWh. 2. Initiated the energy conservation program for 598 computers and peripheral equipment items in 2022, which will not only upgrade the efficiency of the computer but also to reduce the power consumption. 3. The product packaging material recycling and reuse rate was
	Energy sources	Employment of incentive policies to reduce operating expenses		

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	Yes	No	Description						
							2030 targets and working plans at product quality review conferences for compliance with the final target of net zero carbon emissions in 2050.	10% in 2022. 4. Participation in the Bureau of Energy, MOEA "Energy Conservation Service and Promotion Plan for Medium and Small Energy Users" to reduce energy costs.	
					Products and services	Development of new products and services through R&D and innovation, raising the Company's competitiveness	1. Insistence on green design and process innovation, and reliance on TCFD disclosures to enhance corporate green image 2. Continued supply chain management	1. As of 2022, the number of our global front-end RF technology development and application patents surpassed 500. 2. The power consumption of flagship products was improved in 2022, and power consumption can be reduced by 32% in standby mode and by 30% in operating mode. 3. The design of microwave radar built-in signal processing sensor products continue to reduce current in 2022. The current	
					Markets	Entering new markets, increasing operating revenue			
					Resilience	Enhancement of market value and increasing operating revenue through increased new products and improvement			

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4. Our R&D expenditures reached NT$602,470,000 in 2022, and accounted for 18% of the Company's revenue
5. We encourage suppliers to participate in renewable energy products and employ energy conservation methods and energy substitution/diversification plans.</td></tr></table></td><td></td></tr>
<tr><td>(IV) Has the Company compiled statistics on greenhouse gas emissions, volume of</td><td>✓</td><td></td><td>(I)Environmental Management Policies
1. Compliance with international laws and regulations, maintenance of environmental protection</td><td>None</td></tr>
</table>

Promotion item	Implementation Status			The Deviations and Reasons against the Best Practice Principles of Sustainable Development for listed companies of TWSE and TPEx
	Yes	No	Description	
water consumption and total weight of waste in the past two years, and to establish policies for energy conservation, carbon and greenhouse gas reduction, reduction of water consumption or management of other wastes?			Continued attention to changes in domestic and foreign environmental protection policies, laws, and regulations, ensuring that the Company's operations are in full compliance with legal and regulatory requirements; Introduction of green products complying with international environmental protection laws, regulations, and development trends, and satisfying customers' environmental protection requirements. 2. Realizing environmental management and recycling of resources Implementation of ISO 9001: 2015、ISO 14001：2015、ISO 14064-1： 2018 management systems, full-scale realization of environmental management; electronic waste is all turned over to a qualified disposal vendor for reuse of resources, achieving the economic benefits of circular resource use. 3. Encouraging all employees to participate, continuing to adopt improvements Continued efforts to instill environmental protection concepts in all employees through education and awareness, and response to relevant activities by the government and environmental protection groups; Regular review of environmental performance, and investigation and improvement of deficiencies. (II) Scope of data coverage: The Company (III) Statistical data for most recent year: 1. GHG emissions: (1)GHG emissions for the most recent three years	

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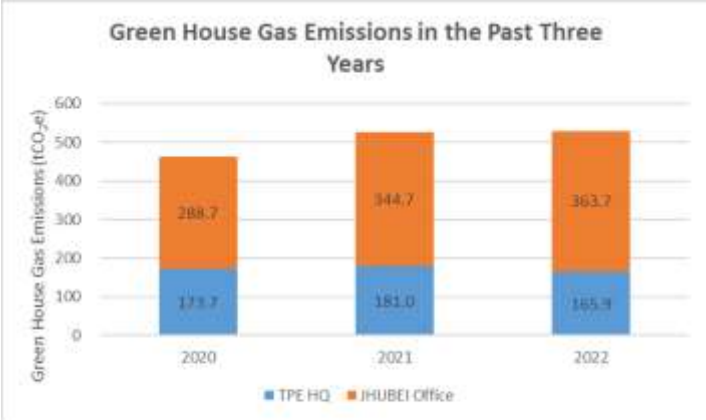

Note: 1. GHG emissions were calculated from inventories using the operational control right method; in view of the Company's operating characteristics, only externally purchased power was included in inventories.

2. GHG emissions in Category 2 were calculated as activity data * electricity carbon emission factor announced for the year by the Bureau of Energy. The electricity carbon emission factor announced by the Bureau of Energy for 2022 of 0.509 kg CO2e/kWh was used in calculations.

(2)Management policy and state of attainment: The Company had Category 2 GHG emissions of 529.5 tCO2e in 2022, which was attributable to the Company's use of LED lighting, spatial arrangements, and leave and adjustment of number of employees working from home during the Covid period. In order to reduce GHG emissions from operating processes, the Company has begun promoting various power conservation projects, and consequently reduced carbon dioxide emissions by 1.972 tCO2e in 2022. Starting in 2023, plans for energy conservation and GHG emissions reduction during

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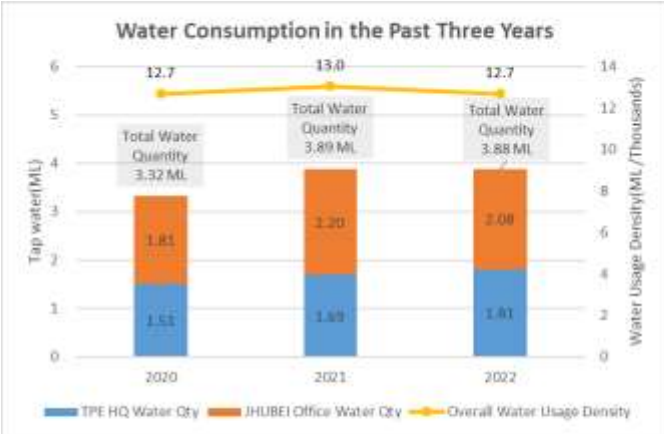
<tr><td></td><td></td><td></td><td>

the next five years have taken a 3% reduction as the management policy target.

2. Water usage:

(1)Water resource use during the most recent three years



(2)Management policy and state of attainment:

Richwave Technology's operating locations are used tap water as their water source. Water is chiefly used for office housekeeping, and no water is obtained from areas where there is water stress. We used 3,880,000 liters of tap water in 2022, which represented a reduction of 0.2% compared with the previous year, and per person water usage was also reduced by 2.8%. We will continue to rely on water resource management to boost our water use efficiency and ensure that water resources are used in the most effective manner.

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3. Waste:

(1)Waste generation during the most recent three years

Waste type	Action taken	2020	2021	2022
General industrial waste	Incineration (kg)	24,977.3	29,179.2	22,677.3
Hazardous industrial waste	Reuse of resources (kg)	367.8	624.3	208.7
Total (kg)		25,345.2	29,803.5	22,885.9

(2)Management policy and state of attainment:

The Company's operating locations have no production processes, and housekeeping trash from offices constitutes the largest portion of wastes. In addition, electronic waste constituting product samples left over from the Company's laboratory testing and QA work is generated at intervals; this waste includes hazardous waste in the form of electronic scrap and defective products. The dedicated waste management unit established by the Company bears responsibility for management of hazardous waste reporting and clearance. The Company's goal is to achieve comprehensive knowledge of waste logistics flow, and ensure that waste disposal processes comply with the government's environmental policies and environmental protection laws and regulations.

The company generated 22.8859 kg of waste in 2022, and this chiefly consisted of general industrial waste, which accounted for 99.1% of all waste; the remaining portion consisted of hazardous industrial waste, which accounted for 0.9% of all waste. Compared with 2021, the Company's waste output decreased by 23.21% in 2022.

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Promotion item	Implementation Status			The Deviations and Reasons against the Best Practice Principles of Sustainable Development for listed companies of TWSE and TPEx
	Yes	No	Description	
IV. Social Issues (I) Does the Company formulate appropriate management policies and procedures according to relevant regulations and the International Bill of Human Rights?		✓	Out of the conviction that Richwave Technology regards its employees as its most important asset, it provides meaningful work content, a safe and healthy working environment, high-quality salary and benefits, and encourages employees to balance work and life, including having a family, making friends, and developing personal interests. Apart from requiring equal employment opportunity and prohibiting discrimination, the Employee Code of Conduct drafted by Richwave Technology also requires employees to jointly maintain a healthy and safe working environment. In the future, we will continue to follow the "United Nations: Guiding Principles on Business and Human Rights" and the "Code of Conduct- Responsible Business Alliance, RBA" to further implement the Company's human rights policy.	None
(II) Does the Company establish and implement reasonable employee benefits (including compensation, leave, and other benefits) and reflected the business performance or results in employee compensation appropriately?	✓		The Company has determined and implemented reasonable employee welfare measures, which include the provision of (1) insurance benefits: In addition to providing basic Labor Insurance and Health Insurance, the Company also has planned group comprehensive insurance for each employee, thereby covering life insurance, major illness insurance, accidental injury insurance, medical insurance, and cancer insurance, and the premiums are borne by the Company. (2) The Company's Workplace Mothers Health Protection Plan drafted in accordance with the Occupational Safety and Health Act has set forth and implemented necessary health and safety measures. The Workplace Mothers Health Protection Plan is ensuring the good health of pregnant, post-partum, and nursing female employees. The Company has (3) retirement measures for formally hired employees. A labor retirement reserve supervisory committee has been established in accordance with the Labor Standards Act, and a certain percentage of total salaries is allocated every month to a retirement reserve fund. (4) Incentives and subsidies include three major holiday bonuses, birthday bonuses, marriage, childbirth and funeral allowances, travel subsidies, and various other bonuses. Regular employees are entitled to the benefits, and other bonuses are issued according to the Company's operating conditions. (5) Specially-contracted on-site health service nurses and and doctors are made available to employees. (6) The Company provides employee health checks every year to realize its concern and	

Promotion item	Implementation Status			The Deviations and Reasons against the Best Practice Principles of Sustainable Development for listed companies of TWSE and TPEx
	Yes	No	Description	
			care for the health of employees. (7) Non-weekday overtime meal expense and transportation subsidies.	
(III) Does the Company provide a safe and healthy work environment, and does it organize safe and healthy training for its employees on a regular basis?	✓		1. Measures to provide employees with a healthy and safe working environment: Richwave Technology's operating locations chiefly consisted of offices. To ensure that employees can work in a safe occupational environment, working environment protection measures conducted on an annual basis include (1) implementation of public area fire safety inspections, (2) monitoring of the working environment, (3) implementation of employee health checkups, (4) health and safety education and training for new employees, (5) fire safety and CPR awareness, (6) a health information bulletin board, and an (7) entry control system. 2. Implementation and acquisition of relevant certifications in 2022: (1) Fire safety inspections are performed in public places: Fire safety inspections were completed in accordance with legal standards during April. (2) Monitoring of working environment: Our Taipei and Hsinchu locations completed monitoring in accordance with legal standards in January and July respectively. (3) Holding employee health checkups: Taipei and Hsinchu locations completed checkups in November. (4) Safety and health education and training for new employees and entry control system: Completed training 140 person times /1680 hours. (5) Fire safety and CPR awareness: Completed in June and October by Taiyuen Hi-Tech Industrial Park. (6) Health information bulletin board: Posted on the Company's internal website and employees' quarterly.	None

Promotion item	Implementation Status			The Deviations and Reasons against the Best Practice Principles of Sustainable Development for listed companies of TWSE and TPEx
	Yes	No	Description	
(IV) Does the Company establish effective career development and training plans for its employees?	✓		The Company has continued to provide a comprehensive training framework, which includes new employee training, management function training, professional function training, and general knowledge classes. A diverse range of learning and development opportunities are provided for each stage of employees' careers, which also allows persons at each stage of their development to meet the expectations of the Company, the environment, and employees. In 2022, Richwave Technology held various professional and general knowledge classes, including classes on such technical subjects as Heat dissipation management for power elements, Couplers and transformers, RF and microwave filters, negotiation techniques, Focused recruiting and interview techniques, and The importance of inner strength in technology development. Education and training classes were provided a total of 535 person-times, and training time totaled 2,579 hours.	None
(V) Does the Company follow relevant laws, regulations and international guidelines for the customer health and safety, customer privacy, and marketing and labeling of its products and services, and establish related consumer protection policies and grievance procedures?	✓		The Company places heavy emphasis on customer satisfaction, and has continuously sought improvement in product quality in order to satisfy customers' needs. With regard to implementation, we rely on our global customer support system to perform multifaceted systematic communications. We look at things from our customers' perspective, and actively resolve customers' problems. We cooperate closely with our R&D team to ensure the thoroughgoing transmission of customers' needs and development of diversified products meeting customer needs. This is how we have established our market image and brand value, while achieving a high level of customer satisfaction and stickiness. We esteem every customer's valuable opinions, and have drafted "Customer Complaint Management Procedures" to facilitate the efficient handling of customer complaints, while also actively reviewing the possible causes of problems and preventing problems from recurring; After first classifying and filing customers' comments and suggestions, we produce "customer complaint notices" to ensure that relevant information can be used effectively in our response and control actions. We then seek to clarify issues, collect relevant data, assist relevant departments to perform improvement in response, and confirm with the customer that they are satisfied with our improvement plan before closing each case. In addition, we have also drafted "Customer Return Operating Standards" to facilitate the handling of customer returns, which are closely connected with customer satisfaction. We seek to	None

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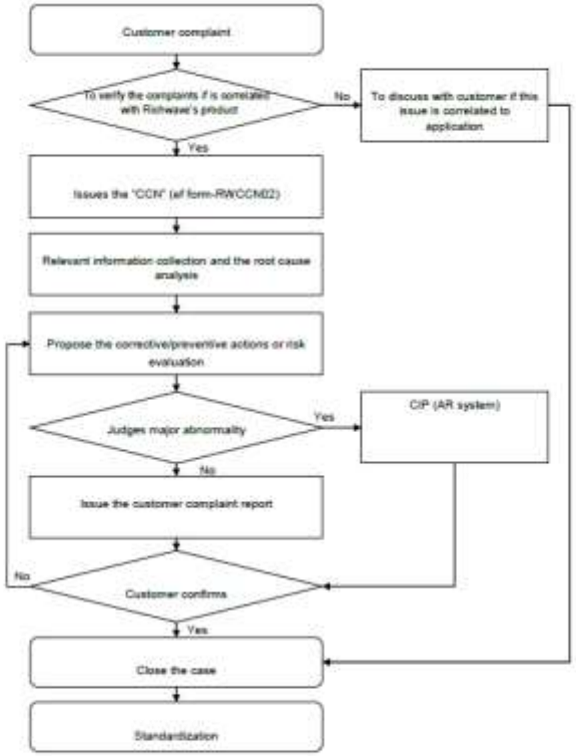
<tr><td></td><td></td><td></td><td>ensure that customers have an excellent product return experience, and thereby maintain a high level of satisfaction with the Company's services.

Customer complaint handling procedures are as follows:



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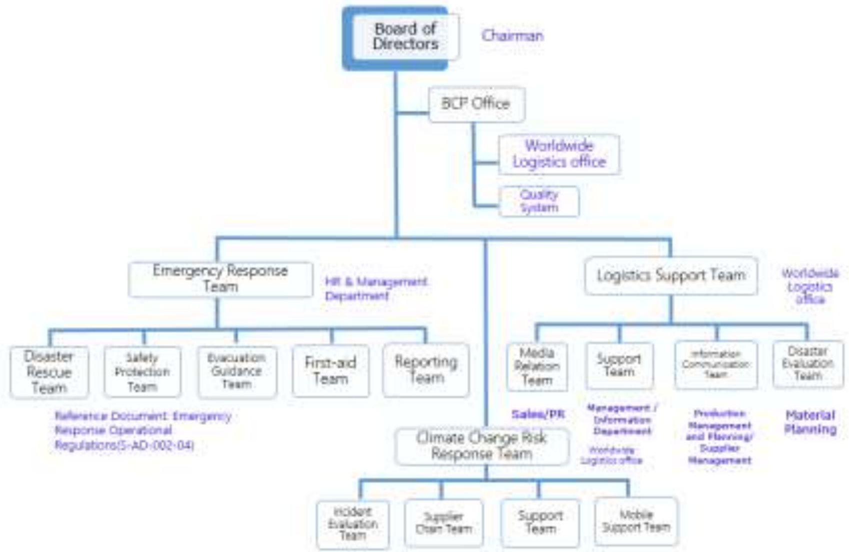
<tr><td>(VI) Does the Company formulate supplier management policies that require suppliers to comply with relevant regulations on environmental protection, occupational safety and health, and labor rights and request them to report on their implementation?</td><td>✓</td><td></td><td>1. The Company has established comprehensive supplier management procedures, which include new supplier screening and detailed checking of suppliers' fulfillment of their corporate social responsibilities; Apart from reviewing suppliers' engineering capabilities, we also require that they provide their international quality certificates, and confirm that they do not use hazardous substances or conflict minerals before they may become registered suppliers of Richwave Technology. In 2022, two new vendors passed the foregoing ESG risk assessment and were registered as new suppliers, with a coverage rate of 100%. As of the end of 2022, 22 suppliers had passed the foregoing ESG risk assessment and become registered suppliers.
2. The Company regularly assesses existing suppliers and conducts occasional supplier audits as needed.</td><td>None</td></tr>
<tr><td>V. Does the Company prepare corporate social responsibility reports and other reports that disclose non-financial information based on universal international reporting standards or guidelines? Does the company obtain assurance or certification of the aforesaid reports from a third-party accreditation institution?</td><td>✓</td><td></td><td>1. The Company plans to issue a corporate sustainability report in July 2023, which will chiefly disclose data and content for 2022 (from January 1, 2022 to December 31, 2022).
2. Information disclosure in the Company's sustainability reports is compiled on the basis of the core options in the GRI Standards issued by the Global Reporting Initiative (GRI). Data and information in the sustainability report is derived from the Company's investigations and statistical analysis of management data concerning each department's daily operations; the basis for calculations also includes local laws and regulations, generally-accepted international indicators, industry standards, and industry practice.
3. We have not yet obtained third-party assurance or guarantees for report, but plan to do so in 2023.</td><td>None</td></tr>
</table>

Promotion item	Implementation Status			The Deviations and Reasons against the Best Practice Principles of Sustainable Development for listed companies of TWSE and TPEx
	Yes	No	Description	
VI. If the Company has established sustainable development principles based on the "Sustainable Development Best Practice Principles for TWSE/TPEx Listed Companies," describe the implementation and any deviations from the Principles: Although we have not yet determined rules of sustainable development practice, the Company has already implemented the principles of the Sustainable Development Best Practice Principles for TWSE/TPEx Listed Companies, and has drafted and is implementing relevant standards. The Company plans to actively and autonomously issue its 2022 corporate sustainability report in July 2023.				
VII. Other important information to facilitate better understanding of the Company's sustainable development practices: The Company has established a special area for corporate sustainability, which disclose the Company's corporate sustainable responsibility policies, specific initiatives and achievements. Please refer to the Company's official website https://www.richwave.com.tw/zh/index.aspx				

Task Force on Climate-related Financial Disclosures (TCFD)

<table>
<tr><th>Item</th><th>Implementation Status</th></tr>
<tr><td>1. Clearly state the supervision and governance of climate-related risks and opportunities by the board and management.</td><td>Item 1:
(1) A climate change risk response task force has been established within the existing continuing operations team, and has the board as its highest guiding and supervisory unit. The Global Affairs Office serves as the convening unit, and is responsible for policy/plan awareness, communication and coordination between different teams and departments, and supervision of implementation.
(2) The climate change risk response task force is composed of incident investigation, supply chain, support, and action groups.
BCP Organizational Chart


(3) Identify risks and opportunities through periodic,and report the high risk assessment report and countermeasures to the Board of Directors。</td></tr>
</table>

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<tr><th>Item</th><th>Implementation Status</th></tr>
<tr><td>2. Clearly state how the identified climate risks and opportunities will influence the company's services, strategies, and finances (short-term, mid-term, long-term).
3. Clearly state the impact of extreme climate events and transition activities on the company's finances.</td><td>In Item 2&3:
Climate-related risks and opportunities and response strategies
<table>
<tr><th>Risk/opportunity type</th><th>Explanation of climate risks and opportunities</th><th>Potential financial impact</th><th>Response strategies</th><th>Annual actions</th></tr>
<tr><td rowspan="2">Physical risks</td><td>Immediate risks: Drought or typhoon caused by extreme climate</td><td>Direct or indirect interruption of operations or financial losses.</td><td rowspan="2">1. Regular assessment of the Company's internal risks, drafting and implementation of risk mitigation measures.
2. Establishment of emergency response procedures and implementation of regular drills
3. Regular implementation of supply chain audits and issuance of recommendations for improvement.</td><td rowspan="2">1. Internal risk assessment was implemented in Q4 2022, and assessment results were submitted to the board in February 2023.
2. Drills were conducted in June and October of 2022.
3. Supplier-end BCP activities have continued in the form of questionnaires & confirmation of annual audit implementation.</td></tr>
<tr><td>Long-term risks: Persistent heat waves caused by continuing high temperatures</td><td>Increased operating expenses due to increases in power use</td></tr>
<tr><td rowspan="2">Transition risks</td><td>Policies, laws, and regulations</td><td>A carbon pricing mechanism instituted by government increases operating costs</td><td rowspan="2">Short-term strategies: Annual drafting and implementation of energy conservation and carbon emissions reduction plans and continued green procurement.
Mid-term strategies: Adoption of a TCFD program, establishment of an effective climate change risk and opportunity identification system
Long-term strategies:</td><td rowspan="2">1. Passed ISO 14001 and ISO 14064-1 certification in 2022, and systematically implemented environmental management and greenhouse gas emissions controls.
2. Reduced power use by 79,735 kWh in 2022; reduced greenhouse gas emissions by 4.0585 tCO_2e.
3. Continued to implement supply chain management procedures and require suppliers to comply with</td></tr>
<tr><td>Markets</td><td>The rising cost of raw materials and components and changes in customer behavior have affected input costs (such as outsourcing costs, inventory management, and energy) and changes</td></tr>
</table>
</td></tr>
</table>

Item	Implementation Status				
			in output demand (such as inventory write-off, waste handling expenses) have caused production and operating costs to rise.	Drafting of strategies to reduce climate change risk, and management mechanisms to sustain operations.	regulations: Received ISO 9001/ISO 14001/ ISO14064-1 international environment certifications.
		Technology	In order to meet international standard and customers' demand for low-carbon products, the Company has continued to invest in R&D, design, and product manufacturing, which has caused relevant costs, including both manpower and materials costs, to increase.	Short-term strategies: Meet customers' needs, provide solutions. Mid-/long-term strategies: Continued reliance on green, innovative R&D and design to boost chip performance and reduce energy consumption; requiring that all of the Company's outsourced service providers comply with international sustainable developmental goals for 2030 and net zero emissions targets for 2050.	Estimates based on shipment volume in 2022 indicate that the Company reduced carbon dioxide emissions by approximately 4 tons, and estimates based on projected shipment volume in 2023 suggests that it can reduce carbon dioxide emissions by 37 tons.
		Reputation	Cannot satisfy stakeholders' net zero carbon emissions expectations, causing damage to the company's reputation, affecting customers willingness to place orders, and poten-		

Item	Implementation Status

		tially causing operating losses.		

Risk/opportunity type	Explanation of climate risks and opportunities	Potential financial impact	Response strategies/actions	Annual actions
Opportunities	Resource use efficiency	Reduce energy/resources usage and increase the recycling and reuse rate, reduce operating costs.	Short-term strategies: Use of various energy conservation programs, recycling of product packaging, and supplier management Mid-/long-term strategies: Continued greenhouse gas inventories, active planning and participation in carbon trading markets and use of renewable energy. To facilitate tracking and review, continued annual requirement that all suppliers submit short-term 2025 and midterm 2030 targets and working plans at product quality review conferences for compliance with the final target of net zero carbon emissions in 2050.	1. Installed 638 LED energy-conserving lamps as replacements in 2022, which can reduce power consumption by 45,781 kWh. 2. Initiated the energy conservation program for 598 computers and peripheral equipment items in 2022 which will not only upgrade the efficiency of the computer but also to reduce the power consumption. 3. The product packaging material recycling and reuse rate was 10% in 2022. 4. Participation in the Bureau of Energy, MOEA "Energy Conservation Service and Promotion Plan for Medium and Small Energy Users" to reduce energy costs.
	Energy sources	Employment of incentive policies to reduce operating expenses		
	Products and services	Development of new products and	3. Insistence on green de-	1. As of 2022, the number of our global front-end

Item	Implementation Status				
			services through R&D and innovation, raising the Company's competitiveness	sign and process innovation, and reliance on TCFD disclosures to enhance corporate green image 4. Continued supply chain management	RF technology development and application patents surpassed 500. 2. The power consumption of flagship products was improved in 2022, and power consumption can be reduced by 32% in standby mode and by 30% in operating mode. 3. The design of microwave radar built-in signal processing sensor products continue to reduce current in 2022. The current used by 5.8GHz sensors fell to 10mA in 2022, which represented a reduction of 75%, and the current used by 10GHz sensors fell to 20mA, which was a reduction of 63%. 4. Our R&D expenditures reached NT$602,470,000 in 2022, and accounted for 18% of the Company's operating revenue. 5. We encourage suppliers to participate in renewable energy products and employ energy conservation methods and energy substitution/diversification plans.
		Markets	Entering new markets, increasing operating revenue		
		Resilience	Enhancement of market value and increasing operating revenue through increased new products and improvement of supply chain reliability and operating capabilities		

Item	Implementation Status
4. Clearly state how climate risk identification, assessment, and management processes are integrated with the company's overall risk management system.	Item 4： 1. Richwave Technology relies on its business continuity plan (BCP) team to assess potential risks via risk identification procedures, compile major climate risk issues and the corresponding risk management measures, and perform regular annual reviews. 2. Richwave Technology assesses the risks and opportunities posed by policies, laws and regulations, technology, markets, and corporate transition on an annual basis, regularly reviews the risks and opportunities of major climate issues following risk identification, and assesses results and performs continuous rolling revisions. 3. Addressing high-risk climate issues, continuing proposal of improvement measures to reduce risk to an acceptable level.
5. If situational analysis is used to assess resilience toward climate change risks, please explain the situations, parameters, assumptions, and analytical factors that are used, and their chief financial impacts.	In Item 5, situational analysis assessment is not yet being used.
6. If there is a transition plan for responding to the management of climate-related risks, please explain the plan's content, and the indicators and targets used to identify and manage physical risks and transition risks.	In Item 6, there are not yet any transition plans.
7. If internal carbon pricing is used as a planning tool, please explain the basis for pricing.	In Item 7, internal carbon pricing has not yet been formulated.
8. If climate-related targets have been es-	In Item 8, climate-related targets have not yet been set.

Item	Implementation Status
tablished, please explain information including the actions that are covered, GHG emission categories, the planning process, and annual degree of attainment, etc.; If carbon offsets or renewable energy certificates (RECs) are used to reach relevant targets, please explain the source and quantity of carbon reduction in offsets or quantity of renewable energy certificates (RECs).	
9. GHG inventory and state of assurance (also enter in 1-1)	In Item 9, the state of implementation is as follows: 9.1 The parent company completed its 2021 GHG inventory in 2022, and this has received third-party assurance; a GHG verification statement was obtained on November 28, 2022. 9.2 The 2021 GHG inventory and assurance results are as specified in 1-1. 9.3 Assurance of 2022 GHG inventory results is expected to be completed in October.

1-1 State of GHG inventories and assurance

Form instructions:

1、 The information in categories 1 and 2 on this form shall be handling in accordance with the schedule specified in Article 10, Paragraph 2 of these guidelines; the Company may voluntarily disclose the information in Category 3.

2、 The Company can perform GHG inventories employing the following standards:

(1) Greenhouse Gas Protocol (GHG Protocol).

(2) ISO 14064-1 issued by the International Organization for Standardization (ISO).

3、 The assurance organization must comply with the sustainability report assurance regulations of the Taiwan Stock Exchange Corporation and Taipei Exchange.

4、 Subsidiaries can fill out items individually, compile filled out items (such as by filling out the items by country or area), or fill out items on a combined basis (Note 1).

5、 GHG emissions intensity may be calculated on the basis of unit product/service or sales; however, it must at least be disclosed when sales (in NTD million) are used in calculations (Note 2).

6、 The percentage of total emissions accounted for by operating locations or subsidiaries not included in inventory calculations may not be greater than 5%. The foregoing total emissions refers to the emissions volume calculated on the basis of the compulsory inventory scope in form explanation 1.

7、 The explanation of the state of assurance shall summarize the content of the assurance organization's assurance report and the complete assurance opinions shall be attached to the annual report (Note 3).

Company's basic information	In accordance with listed/OTC-traded company sustainable development roadmap regulations, at least the following must be disclosed
☐ Companies with capital of over NT$10 billion, steel industry, cement industry ☐ Companies with capital of over NT$5 billion but less than NT$10 billion ■ Companies with capital of less than NT$5 billion	■ Parent company's individual inventory ☐ Consolidated financial report subsidiaries' inventories ■ Parent company's individual assurance ☐ Consolidated financial report subsidiaries' assurance

Category 1	Total emissions (tons CO2e)	Intensity (tons CO2e/NT$1m) (Note 2)	Assurance organization	Explanation of state of assurance (Note 3)
Parent company	30.0271	0.0056	AFNOR Group	The parent company completed its 2021 GHG inventory check in 2022, and this has received third-party assurance; a GHG verification statement was obtained on November 28, 2022.
Subsidiaries	—	—	—	Subsidiaries will complete inventories during 2027, and will complete inspection during 2029.
Total	30.0271	0.0056	—	—
Category 2	Total emissions (tons CO2e)	Intensity (tons CO2e/NT$1m) (Note 2)	Assurance organization	Explanation of state of assurance (Note 3)
Parent company	593.5783	0.1117	AFNOR Group	The parent company completed its 2021 GHG inventory check in 2022, and this has received third-party assurance; a GHG verification statement was obtained on November 28, 2022.
Subsidiaries	—	—	—	Subsidiaries will complete inventories during 2027, and will complete inspection during 2029.
Total	593.5783	0.1117	—	—

Category 3	Total emissions (tons CO2e)	Intensity (tons CO2e/NT$1m) (Note 2)	Assurance organization	Explanation of state of assurance (Note 3)
Parent company	140.3553	0.0264	AFNOR Group	The parent company completed its 2021 GHG inventory check in 2022, and this has received third-party assurance; a GHG verification statement was obtained on November 28, 2022.
Subsidiaries	—	—	—	—
Total	140.3553	0.0264	—	—

(VI) Implementation of ethical corporate management, deviation from Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies, and reasons thereof:

Evaluation item	Implementation status			Deviations from the Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
I. Establishment of ethical corporate management policies and programs (I) Does the Company declare its ethical corporate management policies and procedures in its guidelines and external documents, and do the board of directors and management work proactively to implement their commitment to those management policies? (II) Does the Company establish a risk assessment mechanism against unethical conduct, analyze and assess on a regular basis business activities within its business scope which are at a higher risk of being involved in unethical conduct, and establish prevention programs accordingly, which shall at least include the preventive measures specified in Paragraph 2, Article 7 of the "Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies"? (III) Does the Company establish policies to prevent unethical conduct with relevant procedures, guidelines of conduct, punishment for violation, rules of appeal clearly stated in the policies, and implement the policies, and review the aforementioned policies on a regular basis?	✓ ✓ ✓		(I) The Company's Board of Directors has passed and established the "Ethical Corporate Management Operating Procedures and Code of Conduct". The President's Office is responsible for promoting and executing ethical corporate management and is obligated to report matters to the Board of Directors whenever necessary. (II) The Company has established the "Ethical Corporate Management Operating Procedures and Code of Conduct". The Company regularly reviews potential risks of unethical conduct and uses the "Ethical Corporate Management Operating Procedures and Code of Conduct" to govern such risks and enhance education and training. The Company also established a whistleblower mailbox to improve the Company's ethical corporate management performance. (III) The Company establishes annual audit plans for audit units to implement audits in accordance with the plan. In the event of special conditions, the Company arranges special audits and reviews and amends related systems.	None
II. Fulfillment of Ethical Corporate Management (I) Does the Company evaluate business partners' ethical records and include ethics-related clauses in the business contracts signed with the counterparties? (II) Does the Company establish a unit under the Board of Directors		✓	(I) The Company carefully reviews all customers and contractors but has not enacted comprehensive ethics-related clauses in the business contracts.	The Company communicates with employees and implements required measures based on actual needs. None

Evaluation item	Implementation status			Deviations from the Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
that specializes in promoting ethical corporate management and report the implementation of the ethical corporate management policies and prevention programs against unethical conduct to the Board on a regular basis (at least once every year)?	✓		(II) The Company's ethical management awareness and implementation matters are concurrently handled by the Audit Office, which is responsible for drafting and supervising implementation of ethical management policies and prevention measures, and regularly reports the state of implementation to the board of directors. The most recent such report was submitted on December 22, 2022	
(III) Does the Company establish policies to prevent conflicts of interest, provide appropriate communication channels, and implement them accordingly?	✓		(III) In case of conflicts of interest, the Company's employees can report to department supervisors or report directly to the President's Office.	None
(IV) Does the Company have effective accounting and internal control systems in place to implement business integrity? Does the internal audit unit follow the results of unethical conduct risk assessments and devise audit plans to audit the systems accordingly to prevent unethical conduct, or engage CPAs to perform the audits?	✓		(IV) The Company establishes annual audit plans for audit units to implement audits in accordance with the plan. In the event of special conditions, the Company arranges special audits.	None
(V) Does the Company regularly hold internal and external educational trainings on ethical corporate management?	✓		(V) The Company regularly hold educational trainings on ethical corporate management including external training for management personnel and internal training for employees.	None
III. Operation of the Whistle-blowing System (I) Does the Company establish both a reward/whistle-blowing system and convenient whistle-blowing channels? Are appropriate personnel assigned to the accused party?	✓		(I) The Company has established a reward/whistle-blowing system and assigned the audit supervisor to process reports.	None
(II) Does the Company establish the standard operating procedures for investigating reported misconduct, follow-up measures to be adopted after the investigation, and related confidentiality mechanisms?	✓		(II) The Company has implemented an audit system and procedures for many years. The Company takes follow-up measures and related confidentiality mechanisms after the investigation.	

Evaluation item	Implementation status			Deviations from the Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies and reasons thereof
	Yes	No	Description	
(III) Does the Company provide protection to whistleblowers against receiving improper treatment?	✓		(III) The Company provides absolute protection for whistleblowers against improper treatment due to their whistleblowing.	
IV. Enhanced Information Disclosure Does the Company disclose its ethical corporate management policies and the results of its implementation on the Company’s website and MOPS?	✓		The Company has disclosed the "Ethical Corporate Management Operating Procedures and Code of Conduct" on MOPS and the Company's website (www.richwave.com.tw) under "Investors" - "Corporate Governance".	None
V. If the Company has established its own ethical corporate management principles based on the Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies, please describe the implementation and any deviations from the Principles: The Company carefully evaluates all customers and contractors but has not enacted comprehensive contracts. Other matters are implemented in accordance with the Best Practice Principles.				
VI. Other important information to facilitate better understanding of the Company’s ethical corporate management: None.				

(VII) If the Company has adopted corporate governance best practice principles or related bylaws, the inquiry method shall be disclosed:

The Company has disclosed the regulations related to corporate governance including the [Corporate Governance Best Practice Principles], [Rules of Procedure for Shareholders' Meetings], [Rules of Procedure for Board of Directors Meetings], [Remuneration Committee Charter], [Audit Committee Charter], [Procedure for the Election of Directors], [Procedures for Handling Material Inside Information], [Ethical Corporate Management Operating Procedures and Code of Conduct], [Standard Operating Procedure for Processing Directors’ Requests], and [ode of Ethical Conduct] on the Company's website under "Investors" - "Corporate Governance".

(VIII) Other Important Information Regarding Corporate Governance: None.

(IX) Status of Internal Control System:

1. Statement of Internal Control System:

RichWave Technology Corporation
Statement of Internal Control System

Date: Feb. 23, 2023

The Company hereby states the results of the self-evaluation of the internal control system for 2022 as follows:

I. The Company acknowledges that the establishment, implementation and maintenance of an internal control system is the responsibility of the Board of Directors and managers, and the Company has established an internal control system. The internal control system is designed to provide reasonable assurance for the effectiveness and efficiency of the operations (including profitability, performance and protection of assets), reliability, timeliness, and transparency of reporting, and compliance with applicable laws and regulations.

II. The internal control system has innate limitations. No matter how robust and effective the internal control system, it can only provide reasonable assurance of the achievement of the foregoing three goals; in addition, the effectiveness of the internal control system may vary due to changes in the environment and conditions. However, the internal control system of the Company has self-monitoring mechanisms in place, and the Company will take corrective action against any defects identified.

III. The Company uses the assessment items specified in the Regulations Governing Establishment of Internal Control Systems by Public Companies (hereinafter referred to as the "Regulations") to determine whether the design and implementation of the internal control system are effective. Based on the process of control, the assessment items specified in the Regulations divide the internal control system into five constituent elements: 1. control environment; 2. risk assessment; 3. control activities; 4. information and communications; and 5. monitoring activities. Each constituent element includes a certain number of items. For more information on such items, refer to the Regulations.

IV. The Company has adopted the aforesaid assessment items for the internal control system to determine whether the design and implementation of the internal control system are effective.

V. Based on the results of the determination in the preceding paragraph, the Company is of the opinion that, as of December 31, 2022, the internal control system (including the supervision and management of subsidiaries), including the design and implementation of the internal control system relating to the effectiveness and efficiency of the operations, reliability, timeliness, and transparency of reporting, and compliance with applicable laws and regulations, is effective and can reasonably assure the achievement of the foregoing goals.

VI. This statement will constitute the main content of the Company's annual report and the prospectus and will be disclosed to the public. Any falsehood or concealment with regard to the above contents will entail legal liability under Articles 20, 32, 171 and 174 of the Securities and Exchange Act.

VII. This statement was approved by the Board of Directors on Feb., 23, 2023, and out of the 9 Directors in attendance, none objected to it and all consented to the content expressed in this statement.

RichWave Technology Corporation

Chairman of the Board: Dye-Jyun Ma (signature and seal)

President: Shih-Chi Wang (signature and seal)

2. The CPA's review report on the Internal Control System: None.

(X) Penalties imposed upon the Company and its employees in accordance with the law, penalties imposed by the Company upon its employees for the violation of the internal control system policy, principal deficiencies, and improvement status during the most recent fiscal year up to the date of publication of the Annual Report: None.

(XI) Major resolutions of shareholders' meeting and board meetings during the most recent fiscal year up to the date of publication of the Annual Report:

1. Major resolutions of the 2022 general shareholders' meeting and implementation:

Date	Major resolutions and implementation	
2022/05/26	1	Adoption of the 2021 Business Report and Financial Statements.
	Implementation status:	Resolution passed.
	2	Adoption of the 2021 Earnings Distribution Proposal.
	Implementation status:	The resolution is passed and implemented according to the shareholders' meeting resolution. Set July 10, 2022, as the distribution base date and July 29, 2022, as the cash distribution date. (cash dividend of NT$3.5 per share)
	3	Proposal to amend some articles of the Company's "Articles of Incorporation."
	Implementation status:	Passed the resolution and announced it on the MOPS site and the Company's website.
	4	Proposal to amend some articles of the Company's "Procedures for the Acquisition or Disposal of Assets."
	Implementation status:	Passed the resolution and announced it on the MOPS site and the Company's website.
	5	Election of directors.
	Implementation status:	Appointment of 9 directors (including 4 independent directors). The newly-appointed directors have terms extending from May 26, 2022 to May 25, 2025.
	6	Dissolution of restrictions on the competitive conduct of the newly-appointed directors.
	Implementation status:	Resolution passed.

2. Important resolutions of the board of directors for 2022 and as of April 20, 2023:

Date	Important Resolutions		Objections or Reservations of Independent Directors	Implementation Status
20th Session of 6th Meeting on February 24, 2022	1	The Company's 2021 employee and director remuneration distribution proposal.	—	Implemented According to the Resolution Results
	2	The Company's 2021 annual business report and financial statement proposal.	—	
	3	The Company's 2021 earnings distribution proposal.	—	
	4	The Company's "2021 Internal Control Statement" proposal.	—	

Date	Important Resolutions		Objections or Reservations of Independent Directors	Implementation Status
	5	Proposal to amend some articles of the Company's "Articles of Incorporation."	—	
	6	Amend some articles of the Company's "Assets Acquisition or Disposal Handling Procedures."	—	
	7	Proposal to change the CPA according to the internal work adjustment of Deloitte Touche Tohmatsu Limited.	—	
	8	The Company's 2022 CPA appointment proposal.	—	
	9	Cash capital increase proposal for the subsidiary Shenzhen YingHong Technology Corp.	—	
	10	The Company's bank loan quota proposal.	—	
	11	Full director re-election proposal.	—	
	12	Director and independent director candidate nomination proposal.	—	
	13	Proposal to release the Company's new directors from the non-compete clause	—	
	14	The Company's 2021 manager dividend proposal.	—	
	15	Proposal on matters related to convening the Company's 2022 regular shareholders' meeting	—	
	Independent director opinions: none.			
	Handling of Independent Directors' Opinions by the Company: none.			
	Resolution Result： passed by all of the attending directors.			
21th Session of 6th Meeting on April 28, 2022	1	The Company's 2022 1st quarter financial statement proposal.	—	Implemented According to the Resolution Results
	2	Passed the 2022 cash capital increase through the issuance of new shares and issuance of first domestic unsecured convertible corporate bonds.	—	
	Independent director opinions: none.			
	Handling of Independent Directors' Opinions by the Company: none.			
	Resolution Result： passed by all of the attending directors.			
1st Session of 7th Meeting on May 26, 2022	1	Election of 7th chairman.	—	Implemented According to the Resolution Results
	2	Passed appointment of the members of the Company's 5th Remuneration Committee.	—	
	Independent director opinions: none.			
	Handling of Independent Directors' Opinions by the Company: none.			
	Resolution Result： passed by all of the attending directors.			
2nd Session of 7th Meeting on June 6, 2022	1	The Company's bank loan limit proposal.	—	Implemented According to the Resolution Results
	2	Passed the record date for distribution of cash dividends and adjustment of the exercise price of employees' stock options.	—	
	Independent director opinions: none.			
	Handling of Independent Directors' Opinions by the Company: none.			
	Resolution Result： passed by all of the attending directors.			
	1	The Company's 2022 2nd quarter financial report proposal.	—	Implemented According to

Date	Important Resolutions		Objections or Reservations of Independent Directors	Implementation Status
3rd Session of 7th Meeting on July 28, 2022	2	Proposal to amend some articles of the Company's "Rules of Procedure for Shareholders' Meetings".	—	the Resolution Results
	Independent director opinions: none.			
	Handling of Independent Directors' Opinions by the Company: none.			
	Resolution Result： passed by all of the attending directors.			
4th Session of 7th Meeting on October 27, 2022	1	The Company's 2022 3rd quarter financial statement proposal.	—	Implemented According to the Resolution Results
	2	Proposal to amend some articles of the Company' " Internal Control System s".	—	
	Independent director opinions: none.			
	Handling of Independent Directors' Opinions by the Company: none.			
	Resolution Result： passed by all of the attending directors.			
5th Session of 7th Meeting on December 22, 2022	1	The Company's 2023 "Internal Audit Plan" proposal.	—	Implemented According to the Resolution Results
	2	Passed the Company's adjustment of it inter-company investment structure.	—	
	3	Passed the revision to part of the Company's "Material Internal Information Processing and Insider Trading Prevention Regulations".	—	
	Independent director opinions: none.			
	Handling of Independent Directors' Opinions by the Company: none.			
	Resolution Result： passed by all of the attending directors.			
6th Session of 7th Meeting on February 23, 2023	1	The Company's 2022 employee and director remuneration distribution proposal.	—	Implemented According to the Resolution Results
	2	The Company's 2022 annual business report and financial statement proposal.	—	
	3	The Company's 2022 earnings distribution proposal.	—	
	4	The Company's "2022 Internal Control Statement" proposal.	—	
	5	Proposal to amend some articles of the Company's "Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies".	—	
	6	The Company's 2023 CPA appointment proposal.	—	
	7	Passed the proposal to establish a first corporate governance manager.	—	
	8	The Company's 2022 manager dividend proposal.	—	
	9	Proposal on matters related to convening the Company's 2023 regular shareholders' meeting	—	
	Independent director opinions: none.			
	Handling of Independent Directors' Opinions by the Company: none.			
	Resolution Result： passed by all of the attending directors.			

(XII) Any dissenting opinion expressed by a director or supervisor with respect to a major resolution passed by the Board of Directors during the most recent fiscal year

and up to the date of publication of the Annual Report, where said dissenting opinion has been recorded or prepared as a written declaration: None.

(XIII) A summary of resignations and dismissals of the Company's chairperson, president, accounting manager, financial manager, chief internal auditor, or research and development officer during the most recent fiscal year and up to the date of publication of the Annual Report: None.

V. Certified Public Accountant (CPA) Fee Information

(I) Certified Public Accountant (CPA) Fee Information

CPA firm	Name of CPAs	Audit period	Audit fee	Non-audit fee	Total	Remarks
Deloitte, Taiwan	Su-Li Fang	2022/01/01-2022/12/31	3,250	600	3,850	None
	Jian-Ming Zeng	2022/01/01-2022/12/31				

Note: Non-audit fees include the review and certification of the salaries of non-management personnel, and tax advisory servicesand .

1. When the company changes its accounting firm and the audit fees paid for the fiscal year in which such change took place are lower than those for the previous fiscal year, the amounts of the audit fees before and after the change and the reasons shall be disclosed: Not applicable.
2. When the audit fees paid for the current fiscal year are lower than those for the previous fiscal year by 10 percent or more, the reduction in the amount of audit fees, reduction percentage, and reason(s) thereof shall be disclosed: No such occurrences.

(II) Evaluation of the independence of CPAs: The Company evaluates the independence of CPAs on the following dimensions every year and reports the evaluation results to the Board of Directors.

The 2022 evaluation results met criteria for independence and the evaluation items were as follows:

1. The CPA does not have significant financial interest in the Company.
2. The CPA avoids any inappropriate relationship with the Company.
3. The CPA shall ensure that his/her assistants are honest, fair and independent.
4. The CPA does not and had not served as the Company's director, supervisor, managerial officer, or positions that may have significant impact on the audit in the most recent two years.
5. During the audit period, the CPA, his/her spouses, and dependents did not serve as directors, supervisors or managerial officers of the Company and did not assume

positions that may directly and significantly affect the audit during the audit period. If a close relative of the CPA within the fourth degree of kinship serves as a director, supervisor, or managerial officer of the Company or positions that may directly and significantly affect the audit during the audit period, the breach of independence must be reduced to an acceptable level.The CPA did not receive gifts or presents of significant value (where their values have not exceeded the general etiquette standards) from the Company or directors, supervisors, or managerial officers of the Company.

6. The CPA may not permit others to practice under his/her name.
7. The CPA may not engage in lending and borrowing of money with the Company except for regular transactions in the finance industry.
8. The CPA may not concurrently engage in other businesses that may lead to loss of independence.
9. The CPA may not collect any commission related to his/her service.
10. The CPA may not hold shares in the Company.
11. The CPA may not hold any concurrent regular position in the Company nor receive any fixed salary.
12. The CPA may not engage in joint investments or benefit sharing with the Company.
13. The CPA may not participate in the decision-making process of the Company in a management capacity.

VI. Information on Replacement of CPAs

The Company has changed the CPAs in the past two years and in the subsequent period:

(I) Regarding the former CPAs:

<table>
<tr><td>Date of Replacement</td><td colspan="3">From the financial statements on Q1, 2022 (approved by the Board of Directors on February 24, 2022</td></tr>
<tr><td>Reason for Replacement and Explanation</td><td colspan="3">In accordance with requirements for rotations of CPAs in related regulations.</td></tr>
<tr><td rowspan="3">Statement on whether the authorizing party or the CPA terminated or declined the engagement</td><td>Counterparty
Situation</td><td>CPA</td><td>The Authorizing Party</td></tr>
<tr><td>Voluntarily terminated the engagement</td><td>N/A</td><td>N/A</td></tr>
<tr><td>CPA declined to accept (continue) the appointment</td><td>N/A</td><td>N/A</td></tr>
<tr><td>The opinion and reason for issuing an audit report expressing other than an unqualified opinion during the 2 most recent years</td><td colspan="3">N/A</td></tr>
<tr><td rowspan="2">Different opinions from the issuer</td><td>None</td><td colspan="2">Accounting principles or practices</td></tr>
<tr><td>None</td><td colspan="2">Disclosure of financial statements</td></tr>
</table>

Date of Replacement	From the financial statements on Q1, 2022 (approved by the Board of Directors on February 24, 2022	
	None	Scope or procedure of auditing
	None	Others
Other Disclosures (Matters that should be disclosed in accordance with Item 1-4 to 1-7, Subparagraph 6, Article 10 of the Regulations)	None	

(II) Regarding the succeeding CPAs:

CPA Firm	Deloitte, Taiwan
Name of CPAs	Jian-Ming ,Zeng, CPA & Su-Li Fang CPA
Date of Engagement	From the financial statements on Q1, 2022 (approved by the Board of Directors on February 24, 2022
Subjects discussed and the consultation results with the newly engaged CPAs regarding the accounting treatment of or application of accounting principles to a specified transaction, or the type of audit opinion that might be rendered on the company's financial report prior to the formal engagement	None
Written views from the successor CPAs regarding the matters on which they did not agree with the former CPAs	None

(III) The former CPA's response for Article 10, Subparagraph 6, Item 1 and Item 2-3 of the accounting standards: Not applicable.

VII. Company Chairperson, President, or Any Managerial Officer in Charge of Finance or Accounting Matters in the Most Recent Fiscal Year Holding a Position at the Company's CPA Accounting Firm or at an Affiliated Enterprise of Such Accounting Firm: None.

VIII. Any Transfer of Equity Interests and/or Pledge of or Change in Equity Interests (During the Most Recent Fiscal Year or During the Current Fiscal Year up to the Date of Publication of the Annual Report) by a Director, Supervisor, Managerial Officer, or Shareholder with a Stake of More than 10 Percent

(I) Transfers of shares and pledged shares by directors, supervisors, managers and major shareholders:

Unit: shares

Title	Name	2022		2023 up to March. 27	
		Increase (decrease) in shares held	Increase (decrease) in shares pledged	Increase (decrease) in shares held	Increase (decrease) in shares pledged
Chairman of the Board	Dye-Jyun Ma	84,207	0	0	0
Director/President	Shih-Chi Wang	96,253	0	0	0
Director/ Senior Executive Vice President of R&D	Wei-Kang Teng	14,465	0	0	0
Director/ Director	Ching-Hua Wang	50,000	0	0	0
Senior Vice President	Tzu-Hsiang Liu	14,101	0	0	0
Independent Director	Chih-Hung Wen	10,000	0	0	0
Independent Director	Chiang-Lin Chang	0	0	0	0
Independent Director	Chia-Ying Ma	0	0	0	0
Independent Director	Wen-Hsiang Lu	0	0	0	0
Senior Vice President	Chuan-Chen Chao	16,976	0	0	0
Vice President of R&D	Hsiang-Feng Chi	10,191	0	0	0
Vice President of R&D	Chi-Fu Liang	0	0	0	0
Finance and Accounting Manager	Wei-Che Hsu	8,000	0	0	0
Vice President of Sales Marketing	Chih-Chieh Huang	0	0	0	0
Vice President of Operations	Hung-Shuo Chang	6,000	0	0	0
Senior Assistant Vice President	Mei-Hui Lin	0	0	0	0

(II) Information regarding equity transfer: None.

(III) Information regarding pledging of shares: None.

IX. Information on the Relationship among the Top Ten Shareholders Who are Identified as Related Parties, Spouse or Relative within Second-Degree of Kinship

Shareholding information as of Mar. 27, 2023; unit: shares

Name	Personal shareholding		Spouse & minor shareholding		Shares held under nominee accounts		Shareholders with the top 10 shareholding ratios who are related, or their spouses and second-degree relatives' names and their respective relationships		Remarks
	Number of shares	Shareholding ratio	Number of shares	Shareholding ratio	Number of shares	Shareholding ratio	Title (or name)	Relation	
Shih-Chi Wang	3,703,010	4.11%	2,804,747	3.11%	0	0.00%	Dye-Jyun Ma	Spouse	—
Dye-Jyun Ma	2,804,747	3.11%	3,703,010	4.11%	0	0.00%	Shih-Chi Wang	Spouse	—
Investment account of the Highclere International Investor Small Enterprise Fund under the custody of HSBC Bank (Taiwan)	1,343,327	1.49%	—	—	0	0.00%	None	None	—
Vanguard Emerging Markets Stock Index Fund managed by the Vanguard Group under the custody of the Taipei branch of JP Morgan Chase Bank	1,121,736	1.24%	—	—	0	0.00%	None	None	—
Stock 2 investment case of the Danica Retirement Department of Danske Capital under the custody of the Taipei branch of JP Morgan Chase Bank	1,045,249	1.16%	—	—	0	0.00%	None	None	—
Vanguard General International Stock Index Fund, one of a series of Vanguard Star Funds under the custody of the Taipei branch of JP Morgan Chase Bank	1,037,337	1.15%	—	—	0	0.00%	None	None	—
Government retirement pension investment fund—internal trading platform-MTBJ4000 under the custody of Standard Chartered Bank	988,000	1.10%	—	—	0	0.00%	None	None	—
PFA Investment Association investment account under the custody of the Taipei branch of JP Morgan Chase Bank	962,879	1.07%	—	—	0	0.00%	None	None	—
C Global investment account under the custody of HSBC Bank (Taiwan)	816,134	0.91%	—	—	0	0.00%	None	None	—
Chuan-Chen Chao	778,584	0.86%	—	—	0	0.00%	None	None	—

X. Total Number of Shares and Total Equity Stake Held in any Single Enterprise by the Company, Its Directors and Supervisors, Managers, and Any Companies Controlled Either Directly or Indirectly by the Company

Not applicable

Chapter IV. Capital Overview

I. Capital and Shares

(I) Sources of capital:

March. 27, 2023; Unit: shares; NT$

Month/year	Issue price	Authorized capital		Paid-in capital		Remarks		
		Shares	Amount	Shares	Amount	Sources of capital	Subscriptions paid with property other than cash	Others
2004.01	10	100,000	1,000,000	100,000	1,000,000	Initial capital: NT$1,000,000.	-	Jian-Fu-Shang No. 09300030410 dated Jan. 7, 2004
2004.03	10	4,000,000	40,000,000	20,000,000	200,000,000	Cash capital increase: NT$199,000,000	-	Jian-Fu-Shang No. 09307004900 dated Mar. 12, 204
2005.05	10	4,000,000	40,000,000	26,666,000	266,660,000	Cash capital increase: NT$66,660,000	-	Jian-Fu-Shang No. 09409199510 dated May 26, 2005
2006.03	10	4,000,000	40,000,000	31,666,000	316,660,000	Cash capital increase: NT$50,000,000	-	Jian-Fu-Shang No. 09575767410 dated Apr. 20, 2006
2007.11	10	4,000,000	40,000,000	34,666,000	346,660,000	Cash capital increase: NT$30,000,000	-	Fu-Chan-Ye-Shang No. 09692669010 dated Nov. 30, 2007
2009.03	10	4,000,000	40,000,000	35,341,000	353,410,000	Employees' exercise of share subscription warrants: NT$6,750,000	-	Fu-Chan-Ye-Shang No. 09882283610 dated Mar. 17, 2009
2009.08	10	4,000,000	40,000,000	35,421,000	354,210,000	Employees' exercise of share subscription warrants: NT$800,000	-	Fu-Chan-Ye-Shang No. 09886292310 dated Aug. 6, 2009
2010.02	10	4,000,000	40,000,000	36,513,000	365,130,000	Employees' exercise of share subscription warrants: NT$10,920,000	-	Fu-Chan-Ye-Shang No. 09980422910 dated Feb. 12, 2010
2010.06	10	10,000,000	100,000,000	38,013,000	380,130,000	Cash capital increase: NT$15,000,000	-	Fu-Chan-Ye-Shang No. 09985153020 dated Jul. 8, 2010
2010.06	10	10,000,000	100,000,000	38,904,436	389,044,360	Capitalization of earnings: NT$8,914,360	-	Fu-Chan-Ye-Shang No. 09985986910 dated Jul. 28, 2010
2010.06	10	10,000,000	100,000,000	39,000,586	390,005,860	Employee bonus converted to capital increase: NT$961,500	-	Fu-Chan-Ye-Shang No. 09985986910 dated Jul. 28, 2010
2010.07	10	10,000,000	100,000,000	39,270,586	392,705,860	Employees' exercise of share subscription warrants: NT$2,700,000	-	Fu-Chan-Ye-Shang No. 09985986910 dated Jul. 28, 2010
2011.04	10	10,000,000	100,000,000	40,275,586	402,755,860	Employees' exercise of share subscription warrants: NT$10,050,000	-	Fu-Chan-Ye-Shang No. 10082496410 dated Apr. 26, 2011

Month/year	Issue price	Authorized capital		Paid-in capital		Remarks		
		Shares	Amount	Shares	Amount	Sources of capital	Subscriptions paid with property other than cash	Others
2011.11	10	10,000,000	100,000,000	40,353,586	403,535,860	Employees' exercise of share subscription warrants: NT$780,000	-	Fu-Chan-Ye-Shang No. 10088581810 dated Nov. 4, 2011
2012.05	10	10,000,000	100,000,000	40,412,586	404,125,860	Employees' exercise of share subscription warrants: NT$590,000	-	Fu-Chan-Ye-Shang No. 10183087510 dated May 7, 2012
2012.09	10	10,000,000	100,000,000	40,484,586	404,845,860	Employees' exercise of share subscription warrants: NT$720,000	-	Fu-Chan-Ye-Shang No. 10187747900 dated Sep. 25, 2012
2013.04	10	10,000,000	100,000,000	40,964,586	409,645,860	Employees' exercise of share subscription warrants: NT$4,800,000	-	Fu-Chan-Ye-Shang No. 10283031510 dated Apr. 23, 2013
2013.08	10	10,000,000	100,000,000	41,057,586	410,575,860	Employees' exercise of share subscription warrants: NT$930,000	-	Fu-Chan-Ye-Shang No. 10287288800 dated Aug. 28, 2013
2014.04	10	10,000,000	100,000,000	41,929,586	419,295,860	Employees' exercise of share subscription warrants: NT$8,720,000	-	Fu-Chan-Ye-Shang No. 10382317110 dated Apr. 2, 2014
2014.08	10	10,000,000	100,000,000	42,430,586	424,305,860	Employees' exercise of share subscription warrants: NT$5,010,000	-	Fu-Chan-Ye-Shang No. 10387457500 dated Aug. 29, 2014
2015.03	10	10,000,000	100,000,000	43,915,586	439,155,860	Employees' exercise of share subscription warrants: NT$14,850,000	-	Fu-Chan-Ye-Shang No. 10481552210 dated Mar. 13, 2014
2015.09	10	10,000,000	100,000,000	43,997,586	439,975,860	Employees' exercise of share subscription warrants: NT$820,000	-	Fu-Chan-Ye-Shang No. 10487420710 dated Sep. 4, 2015
2015.11	10	10,000,000	100,000,000	49,897,586	498,975,860	Cash capital increase: NT$59,000,000	-	Fu-Chan-Ye-Shang No. 10490807000 dated Dec. 7, 2015
2016.08	10	10,000,000	100,000,000	54,887,344	548,873,440	Capitalization of earnings: NT$49,897,580	-	Fu-Chan-Ye-Shang No. 10590600400 dated Jul. 27, 2016
2018.10	10	10,000,000	100,000,000	60,376,078	603,760,780	Capitalization of earnings: NT$54,887,340	-	Jing Shou-Shang No. 10701125770 dated Oct. 08, 2018
2019.08	10	10,000,000	100,000,000	61,403,078	614,030,780	Employees' exercise of share subscription warrants: NT$10,270,000	-	Jing Shou-Shang No. 10801117260 dated Aug. 21, 2019
2019.11	10	10,000,000	100,000,000	61,878,078	618,780,780	Employees' exercise of share subscription warrants: NT$ 4,750,000	-	Jing Shou-Shang No. 10801159610 dated Nov. 13, 2019

Month/year	Issue price	Authorized capital		Paid-in capital		Remarks		
		Shares	Amount	Shares	Amount	Sources of capital	Subscriptions paid with property other than cash	Others
2020.03	10	10,000,000	100,000,000	62,143,078	621,430,780	Employees' exercise of share subscription warrants: NT$2,650,000	-	Jing Shou-Shang No. 10901040480 dated Mar. 30, 2020 Jing Shou-Shang No. 10901081180 dated May 27, 2020
2020.08	10	10,000,000	100,000,000	63,192,078	631,920,780	Employees' exercise of share subscription warrants: NT$10,490,000	-	Jing Shou-Shang No. 10901155330 dated Aug. 24, 2020
2021.08	10	20,000,000	200,000,000	63,192,078	631,920,780	Change Quota Amoun	-	Shou-Shang No. 11001153440 dated Aug. 24, 2021
2021.10	10	20,000,000	200,000,000	88,468,906	884,689,060	Capitalization of earnings: NT$252,768,280	-	Jing Shou-Shang No. 11001188320 dated Oct. 19, 2021
2022.10	10	20,000,000	200,000,000	90,168,906	901,689,060	Cash capital increase: NT$17,000,000	-	Jing Shou-Shang No. 11101187680 dated Oct. 20, 2022

March 27 2023; unit: shares

Shareholding Category	Authorized capital		
	Issued shares	Unissued shares	Total
Ordinary shares	90,168,906 shares	109,831,094 shares	200,000,000 shares

(II) Shareholder structure:

Shareholding information as of Mar. 27, 2023; unit: shares

Shareholder structure / Quantity	Government agencies	Financial institutions	Other institutional shareholders	Individuals	Foreign institutions & natural persons	Total
Number of shareholders	0	24	173	38,679	137	39,013
Shareholding (shares)	0	1,482,844	1,196,567	70,289,128	17,200,367	90,168,906
Percentage (%)	0.00%	1.64%	1.33%	77.95%	19.08%	100.00%

(III) Shareholding distribution status:

1. Ordinary shares:

Shareholding information as of Mar. 27, 2023

Shareholding classification	Number of shareholders	Shareholding (shares)	Percentage (%)
1-999	21,282	1,529,463	1.70%
1,000-5,000	15,421	28,361,834	31.45%
5,001-10,000	1,386	10,113,206	11.21%
10,001-15,000	360	4,532,662	5.03%
15,001-20,000	164	2,962,034	3.28%
20,001-30,000	167	4,129,062	4.58%
30,001-40,000	55	1,948,227	2.16%
40,001-50,000	47	2,160,107	2.40%
50,001-100,000	54	3,720,817	4.13%
100,001-200,000	41	6,030,602	6.69%
200,001-400,000	16	4,699,522	5.21%
400,001-600,000	7	3,383,511	3.75%
600,001-800,000	4	2,775,440	3.08%
800,001-1,000,000	3	2,767,013	3.07%
More than 1,000,001	6	11,055,406	12.26%
Total	39,013	90,168,906	100.00%

2. Preferred shares: Not applicable.

(IV) List of major shareholders:

Names, shares and percentage of shareholding of top ten shareholders with more than 5% of equity:

March 27, 2023; Unit: shares

Shareholding / Name of major shareholder	Shareholding (shares)	Percentage (%)
Shih-Chi Wang	3,703,010	4.11%
Dye-Jyun Ma	2,804,747	3.11%
Investment account of the Highclere International Investor Small Enterprise Fund under the custody of HSBC Bank (Taiwan)	1,343,327	1.49%
Vanguard Emerging Markets Stock Index Fund managed by the Vanguard Group under the custody of the Taipei branch of JP Morgan Chase Bank	1,121,736	1.24%
Stock 2 investment case of the Danica Retirement Department of Danske Capital under the custody of the Taipei branch of JP Morgan Chase Bank	1,045,249	1.16%
Vanguard General International Stock Index Fund, one of a series of Vanguard Star Funds under the custody of the Taipei branch of JP Morgan Chase Bank	1,037,337	1.15%
Government retirement pension investment fund—internal trading platform-MTBJ4000 under the custody of Standard Chartered Bank	988,000	1.10%
PFA Investment Association investment account under the custody of the Taipei branch of JP Morgan Chase Bank	962,879	1.07%
C Global investment account under the custody of HSBC Bank (Taiwan)	816,134	0.91%
Chuan-Chen Chao	778,584	0.86%

(V) Share prices for the past two fiscal years, with company net worth per share, earnings per share, dividends per share, and related information

Unit: thousand shares; NT$

Item		Year	2021	2022	As of March 31, 2023
Market price per share (Note 1)	Highest		688	276.00	147.00
	Lowest		206	88.20	111.50
	Average		429.91	162.42	131.46
Net worth per share (Note 2)	Before distribution		27.10	26.31	—
	After distribution		23.60	26.31(Note3)	—
Earnings per share	Weighted average shares		88,469	88,981	—
	Earnings per share	Before adjustment	5.26	0.62	—
		After adjustment	5.26	0.62	—
Dividends per share	Cash dividends		3.5	0 (Note3)	—
	Stock dividends	Before adjustment	0	0	—
		After adjustment	0	0	—
	Accumulated undistributed dividends (Note 4)		0	0	—
Return on investment	Price/earnings ratio (Note 5)		81.73	261.98	—
	Price/dividend ratio (Note 6)		122.83	—	—
	Cash dividend yield rate (Note 7)		0.81%	—	—

*If retained earnings or capital surplus is used for capital increase, market prices and cash dividends that were retroactively adjusted based on the number of shares after distribution shall be disclosed.

Note 1: Specify the highest market value and the lowest market value of the ordinary shares for each year, and calculate the average market price for each year based on the trading value and turnover for each year.

Note 2: Apply the quantity of shares already issued at the end of the year and specify the status of distribution according to the resolution made by the shareholders' meeting held in the following year.

Note 3: The distribution of earnings for 2020 has been approved by the Board of Directors and will be determined in a resolution of the shareholders' meeting.

Note 4: If the terms of issuance of the equity securities provide that any dividends declared but not paid may be carried forward until the Company has earnings, the amount of accrued unpaid dividends as at the end of such fiscal year shall be disclosed.

Note 5: Price/earnings ratio = average closing price per share for the year/earnings per share.

Note 6: Price/dividend ratio = average closing price per share for the year/cash dividend per share.

Note 7: Cash dividend yield = cash dividends per share/average closing price per share for the current fiscal year.

Note 8: 110 and 111 are individual financial reports audited by CAP.

Note 9: As of the publication date of the annual report, the financial report for the first quarter of 2023 has not been reviewed by CPA.

(VI) Company's dividend policy and implementation thereof

1. Dividend policy established in the Articles of Incorporation:

The Company shall use the earnings for year, if any, to pay taxes first and offset accumulated losses. Next, it shall allocate 10% of the remaining balance as legal surplus reserve. However, no additional legal surplus reserve shall be appropriated once it reaches the Company's paid-in capital. Special reserve shall then be appropriated or reversed from the balance pursuant to relevant laws and regulations. The Board of Directors shall draft the proposal for appropriation of earnings based on the remaining balance, if any, combined with accumulated unappropriated earnings and submit it to the shareholders' meeting for resolution on bonus to shareholders.

The Company has adopted a prudent and balanced dividend policy. We consider factors such as profitability, financial structure, and future development of the Company, and consider the growth of future profitability and capital requirements for the distribution of stock dividends and cash dividends. The percentage of cash dividends distributed shall not be less than 10% of the dividends distributed in the current year.

2. The proposed dividend distribution of shareholders' meeting this year:

The company's dividend policy adopts the principle of stability and balance, and considers factors such as profit status, financial structure and future development of the company, and plans not to distribute dividends.

Any expected material changes in the dividend policy: None.

(VII) Effect upon business performance and earnings per share of any stock dividend distribution proposed or adopted at the most recent shareholders' meeting

The Company did not disclose its 2023 financial forecast and this item is therefore not applicable.

(VIII) Compensation of employees and directors

1. The percentages or ranges with respect to employee and director compensation, as set forth in the Company's Articles of Incorporation

The Company shall appropriate no less than 8% of current year profit as employee compensation by cash or shares upon approval of the Board of Directors. Employee compensation may be issued to employees in affiliate companies that meet certain criteria. The Company may appropriate no more than 1% of the above profit as Directors' compensation upon approval of the Board of Directors. The allocation of employees' and Directors' compensation shall be reported to the shareholders' meeting.

However, when the Company still has accumulated loss, a certain amount of the earnings shall be retained for making up the loss and the remainder may be set aside as compensation for employees and Directors.

2. The accounting in the case of deviation from the basis for stating employees bonus and remuneration to directors, the basis for calculating the quantity of stock dividends to be allocated, and the actual allocation:

The Company calculates the distributable compensation for employees and directors in accordance with the Company Act and the Articles of Incorporation and Ji-Mi No. 052 Interpretation (2007) of the Accounting Research and Development Foundation's (ARDF). The Company prepares estimates in the interim and annual financial statements, and includes the employees' and directors' compensation as an appropriate accounting items under operating expenses based on the nature of the employees' and directors' remuneration. If there is a discrepancy between the amount for distribution approved at the shareholders' meeting and the amount estimated in financial statements, it is considered as a change of estimate and is listed as profit or loss for the current period.

3. Information about allocation of bonus resolved by the Directors' Meeting:

(1) Compensation for employees and Directors shall be distributed in the form of cash or shares. If there is any discrepancy between that amount and the estimated figure for the fiscal year these expenses are recognized, the discrepancy, its cause, and the status of treatment shall be disclosed:

On February 23, 2023, the company's board of directors resolved to pay employee remuneration and director remuneration in cash, please refer to the table below:

Unit: NT$

Distribution item	Distribution amount approved by the Board of Directors (A)	Estimated amount recognized as annual expenses (B)	Difference (A) - (B)	Cause	Implementation status
Employee compensation	8,801,796	5,387,865	3,413,931	To improve employee benefits	The difference is adjusted to profit and loss in 112 years
Director compensation	673,483	673,483	—	None	None

(2) The amount of any employee compensation distributed in stocks, and the size of that amount as a percentage of the sum of the after-tax net income stated in the individual financial reports for the current period and total employee compensation: The Company's Board of Directors resolved in the meeting on Feb. 23, 2023 to distribute employee compensation totaling NT$8,801,796 thousand. The distribution shall be completed entirely in cash and this percentage is therefore not applicable.

4. The actual distribution of employee, director, and supervisor compensation from earnings of the previous fiscal year (with an indication of the number of shares, monetary amount, and stock price, of the shares distributed), and, if there is any discrepancy between the actual distribution and the recognized employee or director compensation, additionally the discrepancy, cause, and how it is treated:

The distribution plan proposed and passed in the board meeting and shareholders' meeting in 2021 was the same as actual conditions. The resolution and distribution conditions are as follows:

Unit: NT$

Board meeting resolution date		2022.02.24	
Item	Amount Recognized in Financial Statements	Actual Distribution	Differences
Employee compensation	NT$ 46,321,338	NT$ 46,321,338	Nonr
Director compensation	NT$ 5,790,167	NT$5,790,167	None

(IX) Share repurchases: None.

II.Issuance of corporate bonds:

March 27, 2023

Type of corporate bonds		First domestic unsecured convertible corporate bonds
Date of issuance (processing)		July 29, 2022
Par value		NT$100,000 per 1,000 shares
Place of issuance and listing		Taipei Exchange
Issue price		Issued at 104.98% of the par value
Total		The total amount of issuance is NT$300 million
Interest rate		0% coupon rate
Maturity		3 years; maturity date: July 29, 2025
Guarantor		None
Trustee		Taishin International Bank Co., Ltd.
Underwriter		Taishin Securities Co., Ltd.
Verification by legal counsel		Lawyer Peng, I-Cheng of Handsome Attorneys-at-Law
CPAs		CPAs Tseng, Chien-Ming and Fang, Su-Li of Deloitte, Taiwan
Repayment method		1. Term to maturity: 3 years 2. Repayment method: Except where the bondholder converts the bonds into the Company's ordinary shares according to Article 10 of these measures or exercises their right to sell the bonds according to Article 19 of these measures, or the Company redeems the bonds in advance according to Article 18 of these measures, or the Company cancels the bonds that it bought back from the OTC market, the Company will repay the convertible corporate bonds in full by cash at par value within ten business days from the day after the maturity date. If the aforementioned date falls on a day when the Taipei securities market is closed, repayment will be postponed to the next business day.
Outstanding principal		NT$300 million
Redemption or early repayment clauses		See the Company's rules for issuing and converting bonds
Restrictive clauses		See the Company's rules for issuing and converting bonds
Name of credit rating institute, date of the rating, and credit rating result on the corporate bonds		None
Attachment of other rights and obligations	The amount converted (exchanged or subscribed) to ordinary shares, global depositary receipts, or other securities up to the publication date of this annual report	From the issuance date to March 31, 2023, bondholders have applied to convert to a total of 0 ordinary shares of the Company.

Type of corporate bonds		First domestic unsecured convertible corporate bonds
	Issuance and conversion (exchange or subscription) rules	Please see the bond issuance information in the bond rating section of the Market Observation Post System (MOPS)
The possible dilution conditions and influence on shareholders' interests caused by the issuance and conversion, exchange, or subscription rules		The number of shares in circulation up to Friday, March 31, 2023, was 90,168,906. If all bondholders of the convertible corporate bonds request conversion at the current conversion price of NT$136.5, then 2,197,802 shares must be issued. The number of shares accounts for 2.44% of the total outstanding shares and should have no material impact on shareholder equity.
Name of custodian institution of exchanged items		None

III. Preferred Shares

None.

IV. Global Depositary Receipts (GDR)

None.

V. Employee Stock Options

(I) Employee stock options:

1. Status of outstanding employee stock options and impact on shareholders' equity:

Shareholding information as of Apr. 20, 2023

Type of employee stock options	The fourth time (period) Employee stock options
Announced effective date	2020.12.01
Issuance date	2021.11.29
Warrant exercise period	5 years
Ratio of issued subscriptions on the total number of shares issued	0.34%
Issues distributed	300
Exercise method	Issuance of new shares
Duration and ratio of restricted shares (%)	50% after two years 75% after three years 100% after four years
Number of shares exercised (thousand shares)	—
Monetary values of share subscriptions exercised (NT$ thousand)	—
Number of shares not yet executed (thousand shares)	—
Number of units recovered by the Company for voidance (thousand shares)	—
Subscription price per share for individuals with share options	—
Units unexercised to total outstanding shares (%)	—
Impact on shareholders' equity	The Company attracts and retains the professional talents required by the Company, and enhances the Company's coherence and sense of

Type of employee stock options	The fourth time (period) Employee stock options
	belonging among employees, jointly creating the interests of the company and shareholders, and has a positive impact on shareholders' equity.

2. Names of managerial officers receiving employee stock options and names of top ten employees receiving employee stock options, their exercise and subscription:

Apr. 20, 2023

<table>
<tr><th rowspan="2"></th><th rowspan="2">Title</th><th rowspan="2">Name</th><th rowspan="2">Stock subscriptions obtained (thousand shares)</th><th rowspan="2">Ratio of share subscriptions received on the total shares outstanding (%)</th><th colspan="4">Exercised</th><th colspan="4">Unexercised</th></tr>
<tr><th>Share subscriptions (thousand shares)</th><th>Subscription price (NT$)</th><th>Monetary values of share subscriptions (NT$ thousand)</th><th>Ratio of share subscriptions on the total shares outstanding (%)</th><th>Share subscriptions (thousand shares)</th><th>Subscription price (NT$)</th><th>Monetary values of share subscriptions (NT$ thousand)</th><th>Ratio of share subscriptions on the total shares outstanding (%)</th></tr>
<tr><td rowspan="10">Manager</td><td>Chairman of the Board</td><td>Dye-Jyun Ma</td><td rowspan="10">250</td><td rowspan="10">0.28</td><td rowspan="10">–</td><td rowspan="10">–</td><td rowspan="10">–</td><td rowspan="10">–</td><td rowspan="10">–</td><td rowspan="10">–</td><td rowspan="10">–</td><td rowspan="10">–</td></tr>
<tr><td>President</td><td>Shih-Chi Wang</td></tr>
<tr><td>Senior Executive Vice President</td><td>Wei-Kang Teng</td></tr>
<tr><td>Vice President</td><td>Hsiang-Feng Chi</td></tr>
<tr><td>Vice President</td><td>Tzu-Hsiang Liu</td></tr>
<tr><td>Vice President</td><td>Chuan-Chen Chao</td></tr>
<tr><td>Finance and Accounting Manager</td><td>Wei-Che Hsu</td></tr>
<tr><td>Vice President of Sales Marketing</td><td>Chih-Chieh Huang</td></tr>
<tr><td>Vice President of Operations</td><td>Hung-Shuo Chang</td></tr>
<tr><td>Senior Assistant Vice President</td><td>Mei-Hui Lin</td></tr>
<tr><td rowspan="3">Employees</td><td>Senior Manager</td><td>Yu-Ling Chiu</td><td rowspan="3">50</td><td rowspan="3">0.06</td><td rowspan="3">–</td><td rowspan="3">–</td><td rowspan="3">–</td><td rowspan="3">–</td><td rowspan="3">–</td><td rowspan="3">–</td><td rowspan="3">–</td><td rowspan="3">–</td></tr>
<tr><td>Senior Manager</td><td>Guei-Meu Dau</td></tr>
<tr><td>Manager</td><td>Shu-Fang Chin</td></tr>
</table>

(II) Restricted employee shares

1. Status of outstanding employee stock options that have not fully met the vesting conditions and the impact on shareholders' equity: Not applicable.
2. The names of the managers and top ten employees who obtained the new restricted employees' right shares, and the acquisition status: Not applicable.

VI. Issuance of New Shares in Connection with Mergers or Acquisitions or with Acquisitions of Shares of Other Companies

None.

VII. Implementation of the Company's Capital Allocation Plans

(I) Analysis of utilization plan for funds from the current cash capital increase, merger, or the transfer of newly-issued shares of another company's equity, or the issuance of corporate bonds:

1. Project content:

   Cash capital increase through the issuance of new shares and issuance of first domestic unsecured convertible corporate bonds in 2022.

2. Source of funds:

   (1) Cash capital increase through the issuance of 1,700,000 new shares, with a par value of NT$10 per share; each share will have an issue price of NT$105, and the amount of money raised will be NT$178,500,000. Jin-Guan-Zheng-Fa-Zi No. 1110347626 dated July 6, 2022 filed and become effective.

   (2) Issuance of 3,000 first domestic unsecured convertible corporate bonds, with a par value of NT$100,000 per bond. The bonds will be issued on the basis of par value, and total issued par value will be NT$300,000,000; the bonds will have a circulation period of 3 years and a coupon rate of 0%. The bonds will be publicly underwritten by auction, and the issue will be to 104.98% of the face value. The actual amount of funds raised will be NT$314,951,000. Because the actual amount of funds raised will be greater than the total issuance, the increased funds will be used to boost operating funds. Jin-Guan-Zheng-Fa-Zi No. 11103476261 dated July 6, 2022 filed and become effective.

3. Overview of issuance plan and expected possible benefits:

Unit: Thousand NTD

Plan items	Planned completion date	Total funds needed	Scheduled funds utilization timetable	
			2022 Q3	2022 Q4
Repayment of bank loans	2022, Q3	430,000	430,000	—
Increase in operating funds	2022, Q4	63,451	—	63,451
Total		493,451	430,000	63,451

   (1) To repay bank loans will ensure that borrowing does not cause interest expenses from increasing and eroding profits, while enhancing the Company's ability to allocate funds and helping maintain its competitiveness

   (2) To increase operating funds will lessen dependence on bank loans, increase funds utilization flexibility, reduce financial risk, and be benefit to the Company's overall operational development and competitiveness.

4. State of implementation: The actual utilization of funds was fully completed according to plans in Q4 2022, and no plan changes were made.

Chapter V. Operational Highlights

I. Business Activities

(I) Business scope:

1. Primary business activities:

CC01050 Data Storage Media Units Manufacturing

CC01070 Telecommunication Equipment and Apparatus Manufacturing

CC01080 Electronic Parts and Components Manufacturing

E605010 Computing Equipment Installation Construction

F118010 Information Software Wholesaler

E701010 Communication Engineering Services

F119010 Electronic Material Wholesaler

IZ99990 Other Industry and Commerce Services Not Elsewhere Classified (Integrated Circuit Testing Services)

F218010 Retail Sale of Computer Software

F219010 Retail Sale of Electronic Materials

ZZ99999 All business not prohibited or restricted by law, except for those subject to special approval

F401010 International trade

F601010 Intellectual Property

I301010 Software Design Services

I301020 Data Processing Services

I301030 Digital Information Supply Services

I501010 Product Design Services

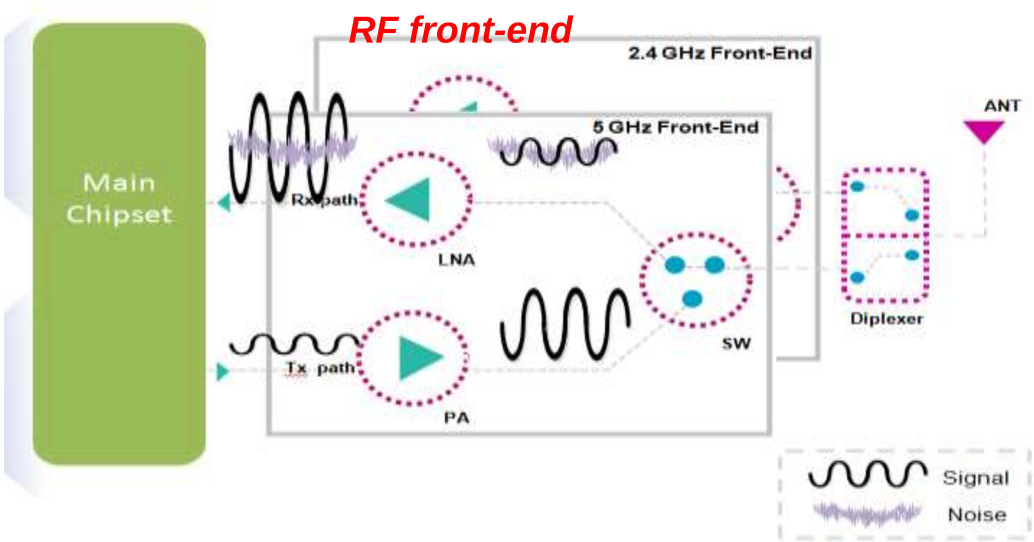
2. Percentage of revenue:

Unit: NT$ thousands; %

Main product categories	2021		2022	
	Amount	Percentage	Amount	Percentage
Wi-Fi	5,038,763	94.78	3,276,955	95.56
Others	277,504	5.22	152,416	4.44
Total	5,316,267	100.00	3,429,371	100.00

Source: Consolidated financial statement certified by the CPA.

3. Current products and services:



The Company's current products and services mainly include:

A. R&D and sales of RFIC front-end modules (FEMs) for Wi-Fi connectivity solutions including power amplifiers, low noise amplifiers, switches, and integrated FEMs.

- Power Amplifier (PA) - The main function of a PA is to amplify signals processed by the baseband processor so that the signal can be transmitted.
- Low Noise Amplifier (LNA) - The main function of an LNA is to amplify the received signal and lower the noise figure in the signal, so that the signal can be used for back-end system.
- Switch (SW) - The main function of an SW is to control the connection or disconnection of the signal transmission path by charge accumulation or extrusion in the electronic channel driven by the voltage.
- Front-end module (FEM) - An FEM is a combination of any PA, LNA, or SW.
- Passive filters - Passive filters include BAW, SAW, and LTCC filters, and are are chiefly used to suppress out-of-band interference in RF paths, which will boost performance and reliability.

B. The development and sales of RFIC and system on chip (SOC) for Hz wireless audio and video transmission including RF transceiver and audio and video compression/decompression SOC.2.4G2.4G

C. R&D and sales of RFIC used for LTE femtocell including power amplifiers and switches.3G4G

D. 5.8GHz/10GHz/UWB (super broadband) microwave radar sensor RF front-end chip and system chip (SOC, system on chip) R&D and sales, including provision of DSP algorithm firmware for detection and identification applications.

4. New products under development:

The new products we plan to develop in the future based on market demand include five main categories:

A. RFIC FEMs for WiFi 6/ WiFi 6E and high-power applications

B. RFIC FEMs for mobile phone applications3G4G5G

C. Wireless transceiver chips that support high-definition and high-speed frequency hopping

D. RFIC chips that support IoT Sub-1GHz applications1G

E. SAW and BAW filter chip series

F. UWB and millimeter wave radar sensor series

(II) Industry overview:

1. Current state and development of the industry:

In recent years, the growing demands for wireless products, optics, and other high-frequency applications have become one of the major growth driving forces for the global radio frequency integrated circuit (RF IC) market. The increasing demands for the Internet of Things (IoT) applications globally have also boosted the demand for RF ICs. According to the ITRI Industrial Economics and Knowledge Center statistics, revenues from the IC design industry have repeatedly reached new highs due to the state of the global IC market short supply caused by the home economy market driven by COVID-19 and the transfer of international order due to the US-China trade war. In 2022, the output of Taiwan's IC design industry was valued at NT$4,837 billion, and the industry's annual growth of 18.5% far exceeded the global semiconductor industry's 3.2% growth. It is expected that steadily growing demand for Wi-Fi and GPS wireless products and services continues to grow will continue to boost growth in the global RF IC market.

RF IC chips are widely used in wireless-related communication fields. It is a general term for all chips that process high-frequency electromagnetic waves. Its main function is to provide various wavelength carriers (radio waves, sound waves, electromagnetic waves, etc.) for data transmission and reception. Therefore, RF IC radio frequency chips are widely used for low-frequency AM, FM, SW (short wave) broadcasting; DVB TV digital broadcasting; higher-frequency wireless communication applications such as GPS, mobile phones, wireless network (WLAN), and Bluetooth; and UHF receiving systems for satellite reception at above 10GHz. RF IC chips are primarily divided into front-end RF chips (including power amplifiers, low noise amplifiers, antenna switches, and front-end integrated RF chips) and RF transceivers. However, due to the extremely high threshold of RF technology, the main front-end RF chip suppliers include Skyworks, Qorvo, and Richwave.

RF design is the key technology for network communication applications, and its main application fields include WiFi, smartphones, and the IoT market. The skyrocketed demands for a remote or unattended terminal scenario such as smart home, logistics, and manufacturing have accelerated the Netcom technology iteration updates. According to the research by TrendForce, Wi-Fi 5 (802.11ac) and Wi-Fi 6 (802.11ax) are the current mainstream market specifications; In order to meet the needs of the Metaverse and other envisioned communication advances, numerous firms have set their sights on the even faster and more stable Wi-Fi 7 (802.11be).

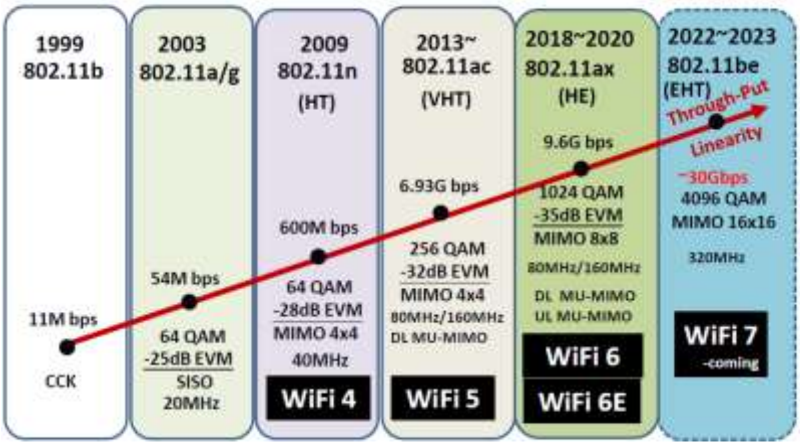
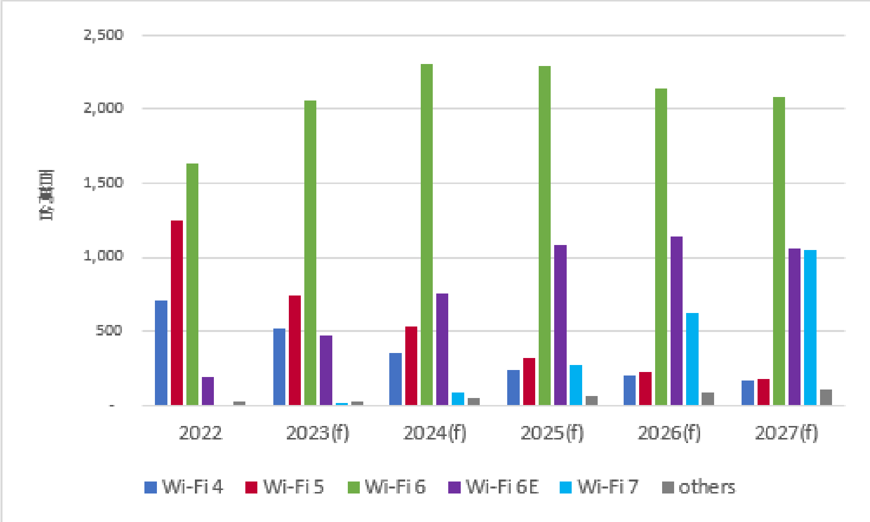


Figure 1: Wi-Fi Evolution, organized by the Company.

With regard to the Wi-Fi market, as Wi-Fi functions encompass even more convenient wireless Internet and wireless living experiences, the penetration of electronic devices with Wi-Fi functions has steadily increased. Looking ahead to the future, the main growth areas of the integrated Wi-Fi market include smart handheld devices, auto applications, family entertainment, game applications, and smart family applications. According to a report from the market research organization IDC, compared with 2022, Wi-Fi product shipments are expected to rise by 0.8% in 2023, and reach 383 million units. The chief drivers of this growth include cell phones, WLAN AP, smart household appliances, and wearable devices.

The IDC report further notes that the main markets for Wi-Fi support equipment shipped in 2022 constituted Wi-Fi 5 and Wi-Fi 6 devices, which accounted for 124 million units and 164 million units respectively. The two specifications combined accounted for 288 million units, which accounted for 76% of the Wi-Fi market as a whole. It is expected that Wi-Fi 6 and Wi-Fi 6E shipments will grow the fastest in 2023, when Wi-Fi 6 and Wi-Fi 6E shipment volume is expected to reach 314 million units, which will cause Wi-Fi 6 and Wi-Fi 6E to replace Wi-Fi 4 and Wi-Fi 5 as the dominant mainstream specifications.

Wi-Fi 7 is the the newest Wi-Fi standard, and is also known as IEEE 802.11be Extremely High Throughput (EHT). It will provide a maximum channel width of 320MHz, which is roughly double that of Wi-fi 6, and in theory will have a maximum transmission rate of as high as 46 Gbit/sec., which is approximately five times that of Wi-fi 6/6E, and will greatly exceed the 5G transmission rate. Because of this, Wi-Fi 7 will achieve even lower latency, even better power performance, reduced interference, and even higher capacity density. It will be able to respond to today's steadily more demanding connection needs, while also ensuring more effective bandwidth utilization. The first Wi-Fi 7 product shipments are expected in 2023. According to IDC's forecast,Wi-Fi 7 product shipments will rise at a compound annual growth rate of 190.6% from 2023 to 2027. And as new iterations of Wi-Fi specifications emerge, the number of RF elements carried by Wi-Fi equipment will also increase, which will allow improved signal transmission rate and coverage of greater bandwidth.



資料來源: IDC Worldwide Wi-Fi Technology Forecast；本公司整理

Figure 2: Global WiFi support equipment shipment forecast (classified by technical standards)

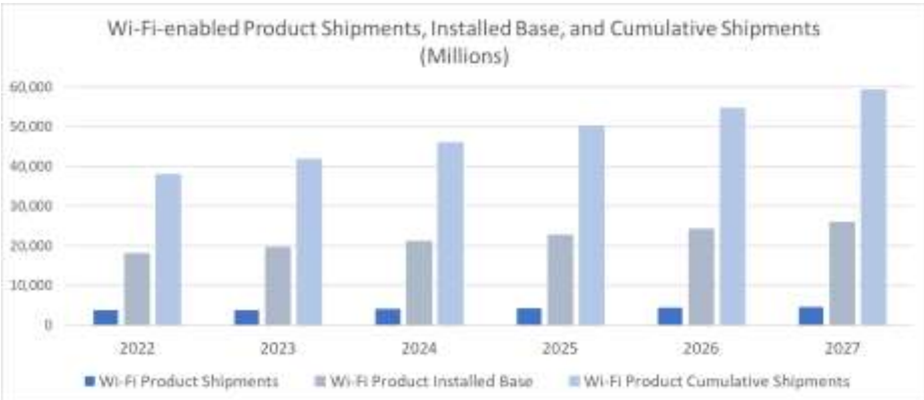


Figure 3: IDC 2020~2027 WiFi product shipment forecast

Turning to the smartphone market, according to the IDC, global smartphone shipments totaled approximately 116 million units in 2023, and the continued promotion of 5G in global markets was the chief driver of smartphone growth. As the mobile communications market made the transition from 4G to 5G, the multi-mode multi-frequency characteristics of 5G smartphone have made RF ICs vital smartphone components. According to Mobile Experts LLC and TriQuint statistics, the value of RF IC front-end RF chips will increase by 2 to 3 times. The data provided by Skyworks, a major RF component manufacturer, also supports this perspective. The 5G network communication coverage deployment by operators in various countries is becoming more comprehensive. The booming 5G device market driven by the basic demand for high-speed data roaming will further expand the growth trend of RF IC front-end RF chips.

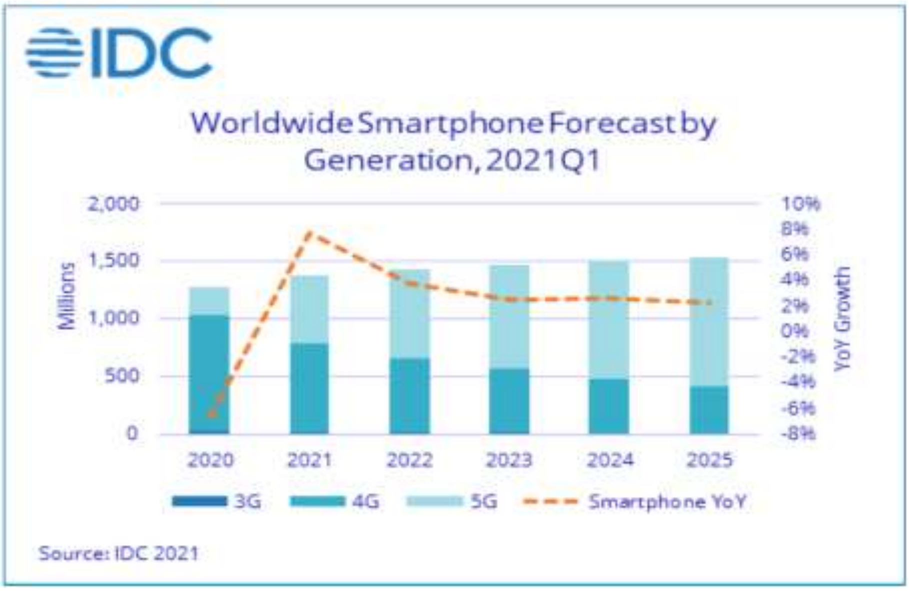


Figure 4: IDC 2020~2025 smartphone shipment forecast

In 2022, Richwave shipped 938 million of its front-end RF chip products, which are used in Wi-Fi RF ICs (average shipment volume was approximately 78 million chips per month). As the market's Wi-Fi 6 demand increases and multi-mode multi-frequency smartphones causes demand for front-end RF chips used in RF ICs to rise, this trend will continue to boost demand for Richwave's front-end RF chip products and the company's sales revenue.

2. The relationship between the upstream, midstream and downstream sections of the industry:

The RFIC supply chain consists mainly of the upstream semiconductor plants and IC design companies, midstream IC manufacturers, and downstream IC packaging and testing plants. Whereas most semiconductor plants in Europe and Americas have adopted the IDM model, Taiwan's semiconductor industry has adopted a division of labor system. Major RFIC plants such as Skyworks, RFMD (note) and Anadigics have their own IC production capacity. As process cost continues to rise in recent years, major semiconductor plants in Europe and Americas have given up investments in new and gradually released production, packaging, and testing purchase orders to companies in Taiwan, creating a curious case of both competition and cooperation between them and professional IC manufacturers in Taiwan. Main companies that specialize in RFIC FEMs include Skyworks, RFMD (Note), RichWave, NXP, Anadigics, and RDA Microelectronics. RFIC manufacturers can be divided into two major categories. Silicon wafer manufacturers include Taiwan Semiconductor Manufacturing Company, United Microelectronics Corporation, and Renesas. Compound semiconductors (gallium arsenide) manufacturers include WIN Semiconductors, Advanced Wireless Semiconductor Company, RFMD (Note), Skyworks, and Anadigics. RFIC packaging plants include Lingsen Precision Industries, Ltd., ASE Group, JCET, Carsem, Nanotech Semiconductor, and Amkor. RFIC testing plants include ASE Group, King Yuan Electronics, UTAC (Taiwan), Giga Solution, and Sigurd.

RFIC industry chain

RF design company	RF manufacturing company	RF packaging company	RF testing company
Skyworks, RFMD (Note), Avago, RichWave, Murata, RDA, NXP, Anadigics, Silicon Lab, etc.	Silicon chip manufacturers include Taiwan Semiconductor Manufacturing Company, United Microelectronics Corporation, and IBM; Gallium arsenide chip manufacturers include WIN Semiconductors, Advanced Wireless Semiconductor Company, RFMD, Skyworks, and Anadigics	Lingsen Precision Industries, Ltd., ASE Group, JCET, Carsem, Nanotech Semiconductor, Sigurd, and Amkor	ASE Group, King Yuan Electronics, UTAC (Taiwan), Giga Solution, and Sigurd

Note: RFMD and TriQuint merged to form a new company called Qorvo

3. Product development trends:

A. RF front-end component:

a. A mobile phone or wireless network platform equipped with one or more RF devices is referred to as an RF terminal device. RF market development is positively correlated to mobile phone and wireless network market trends.

b. Diversity antennas are used to improve the reception of wireless terminal devices. However, a single signal antenna is still used for certain terminal devices. With the adoption of MIMO technology, the future RFIC antenna switch market is expected to achieve rapid growth along with the development of 5G/WiFi devices.

c. As the market share of 5G mobile phones increases, the multi-band multi-mode framework will become the basic structure of smart phones, and the demand for multi-band power amplifiers will continue to grow.

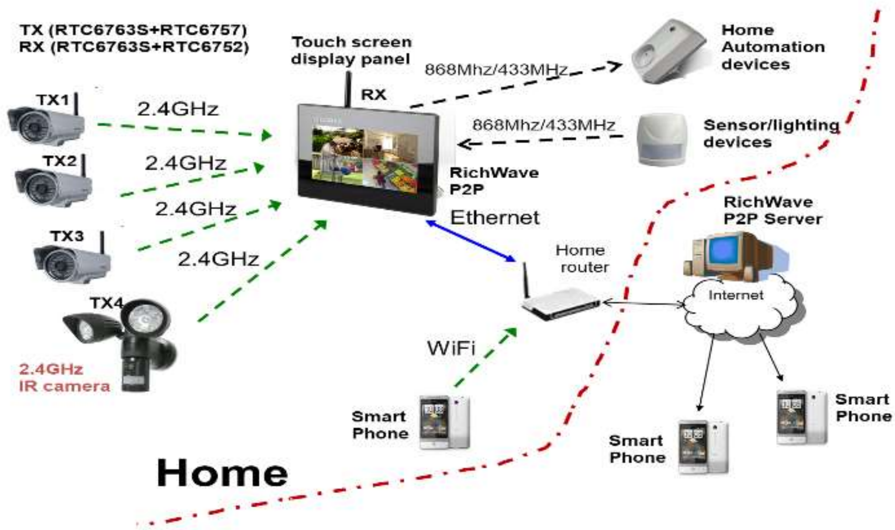
d. Under intense price competition pressure in wireless terminal products, RF chips are gradually integrated into RF modules to reduce cost and meet process requirements. In terms of the RF process, the mainstream RF process technology in the global market remains gallium arsenide (GaAs) which incurs a higher cost but accounts for approximately 80% of the market. However, to reduce costs, the process has gradually shifted to silicon germanium

(SiGe), which accounts for approximately 20%. The industry will continue to move toward lower cost CMOS/SOI processes in the future.

B. Wireless frequency hopping RF transceiver single chip:

Wireless security and surveillance, home automation, and home lighting control in smart home applications with IoT.

RichWave's Hz frequency hopping RF transceiver single chip is mainly used for wireless home security and surveillance, home automation, and home lighting control in smart home applications with IoT, as well as wireless video/audio multimedia transmission. The wireless security and surveillance applications include one-to-one or four-to-one security monitoring and control, wireless video doorbell, wireless automobile reverse view, bi-directional video phone, and caring for young children and the elderly in the family. The wireless video/audio multimedia transmission applications include wireless extension for DVD, wireless extension for digital set-top box, PC to PC, or PC to home family entertainment and gaming. The use of RichWave's RF transceiver chips for wireless home security and surveillance, home automation, and home lighting control in smart home applications with IoT, as well as wireless video/audio multimedia transmission are explained below:2.4G



Wireless security and surveillance, home automation, and home lighting control in smart home applications with IoT

The built-in Hz frequency hopping RF transceiver chip RTC6763S in cameras (TX1 to TX4) compress the data packages in the image and preamble and cyclic redundancy check (CRC) to the receiving terminal (RX), which uses the RTC6763S to remove the synchronized data and CRS. The data is transmitted to

RTC6752 (SOC) to decompress the video feed and restore the video information. The video information on the receiving terminal can be connected to the Ethernet via RichWave's P2P network communication program to obtain the necessary IP addresses on the smart phone for P2P connection and real-time video transmission.2.4G.

The smart phone can be used for real-time home monitoring via Wi-Fi or remote home monitoring and security via 5G networks. The compressed video signals from the TX camera are transmitted wirelessly via RTC6763S to the receiving terminal which disassembles RTC6763S into correct packets. In the event of any errors in the wireless transmission process, RTC6763S will automatically start the resending mechanism to completely restore the image packet data. RTC6763S also has settings for available channels and banned channels and can use the packet error rate (PER) to determine available channels and ensure coexistence with Wi-Fi.

The receiver (RX) also has the built-in Universal Asynchronous Receiver/Transmitter (UART) standard interface that can use the Hz or Hz wireless interface to integrate family automation, sensing components, or lighting control sub-systems. It facilitates smart IoT applications such as smart phone integrated video, audio, sensing, lighting control, and real-time control.868M433M.

C： Microwave/UWB and millimeter wave wireless sensing chip

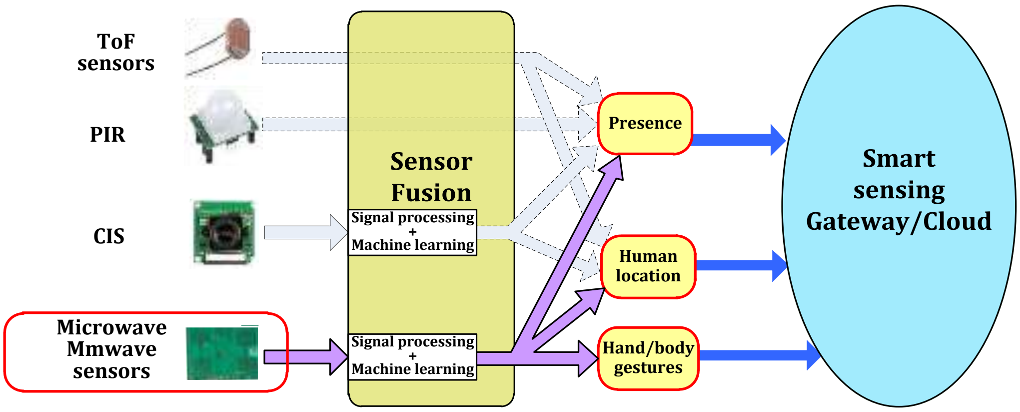
Use of wireless sensor network technology combining wireless networks and transducers to to realize IoT (Internet of Things), home automation, and industrial automation applications. In addition, we have expanded our sensing technology into environmental and human sensing, and provide practical applications in the areas of public safety warnings, health detection, energy conservation control, and vehicular sensing for AI and big data systems, accelerating the adoption of intelligent environmental and personal sensor systems in real-life applications.

Due to demographic aging, limited long-term care center resources, and seniors' own wishes, the percentage of seniors living alone has grown steadily. As a result, remote residential care applications have gradually come into favor, but conventional video monitoring methods are being rejected because of personal privacy worries. In addition, there has been a growing need for contactless health sensing applications for sleeping individuals. There is therefore an urgent need for new sensing technology, and the integration of emergency assistance and medical intelligent systems are expected to play an extremely important role in people's lives.

In the area of vehicular sensing and detection applications, conventional ultrasound backup blind spot sensing systems suffer detection distance and cost optimization restrictions. As a result, there is been a new trend toward backup imaging and microwave sensing applications, which are considered to be an especially advantageous means of protecting pedestrian safety when large vehicles are backing up. In recent years, vehicular sensing functions have become very prevalent. As an example, since there has been a rising number of cases of young children dying when locked in cars, future vehicular in-cabinet sensing systems will be required to have passenger presence detection and physiological system detection functions.

At the COP27 climate change conference held in late 2022, the participating countries drafted strict energy conservation in carbon dioxide emissions reduction targets and timetables. Apart from restricting CO2 emissions from factories and motor vehicles, the conference also issued special rules for the energy conservation performance of household appliances. In Europe and North America, HVAC (heating,ventilation,and air conditioning) systems are the largest residential uses of electricity and gas. A trend toward intelligent energy-conserving household appliances is an inevitable trend, and these appliances will rely on sensing of people's presence, locations, and activities to control and conserve their electrical and gas consumption. This will be the first step in the future development of intelligent energy-saving household appliances. Looking further ahead, sensing information will be used in predictive AI energy conservation management systems, which will provide necessary functions for a new generation of green buildings.

Advanced sensing technology is a key element of intelligent sensor networks and intelligent system, but single-function sensing methods cannot provide reliable sensing information. Conventionally, proximity infrared (PIR) detection taking advantage of human body heat have provided a simple human motion detection functions. However, with the coming of global warming, high-temperature weather has become the norm, and ambient heat will cause infrared sensors to give erroneous readings. In these circumstances, another commonly-used transducer type, CIS (CMOS Image Sensing), can provide highly economical sensing functions. At a time when people are placing increasing value on their personal privacy, and the use of imaging technology to obtain precision information often runs up against physical obstacles, new and innovative forms of sensing technology are urgently needed. In addition, in order to provide more diverse sensing data to intelligent systems, sensor fusion can be employed to provide a wealth of data and achieve even more precise judgments.



Sensor fusion for smart sensing gateway/cloud.

Richwave has been engaging in R&D of high-frequency antennas, microwave sensing chips, and algorithms for many years. As a result, we have achieved a firm grasp of such important key elements as RF technology, microwave antennas, mixed-signal design, digital signal processing, environmental/human/physiological signal detection algorithms, multi-dimensional spatial sensing technology, machine learning, and programmable processor cores. The several types of wireless sensing front-end chips, system chips (SOC), and antenna modules that we have introduced in recent years are being used by some of the world's best-known manufacturers. We are keenly aware that intelligent microwave sensing will continue to provide a basis for cutting-edge industrial technology, which expected to be one of the most promising future markets. We also plan to perform more innovative technology R&D in the area of environmental sensing, and hope to provide even more varied and precise spatial sensing data (including distance, direction, speed, size, micro Doppler, and physiological signals) to back-end intelligent integrated information systems, which will enable the realization of many artificial intelligence and big data applications.

Apart from striving to develop wireless sensor chips, we have also been cooperating with well-known global brands in the continued development of new application scenarios and the corresponding signal identification algorithms. These applications include, for instance, human presence detection, one-dimensional and two-dimensional location detection, and contactless breath and pulse detection, etc. In addition, in remote residential care for seniors, we are also developing contactless hand/body gesture recognition and machine learning technologies, and are using multi-input-multi-output antennas to increase identification correctness.

Richwave's wireless sensors are chiefly used for detection of environmental and human location (distance and angular orientation), hand/body gestures, and subtle movements (including breathing and pulse), etc. These applications require relatively high detection precision and a relatively large wireless scanning bandwidth. Furthermore, because use situations (especially indoor detection applications) only permit small sensing modules and antennas, this poses high requirements on microwave sensing chip sensitivity. In addition, it is also very difficult to decide the required wireless sensing chips. Because of this, RF circuit structure and signal processing chips require unique and innovative designs. Our R&D team has working hard in these areas for a number of years, has accumulated great experience, and has achieved outstanding results, which will enable us to introduce more wireless sensing chip products.

4. Product competition:

RichWave's RF chip product development focuses on both RF front-end components and RF transceivers. We design and manufacture key components for various communication systems (Wi-Fi/mobile phone/handheld device/small base station) with germanium silicon, gallium arsenide substrates, and CMOS/SOI as the main RF front-end components. We created strategic alliances with domestic and international manufacturers of communication system baseband and RF transceiver chips to provide comprehensive solutions. We also work closely with downstream system manufacturers to quickly produce products that meet market demand.

In terms of RF transceivers, RichWave designs and produces frequency hopping wireless communication chips based on 0.18um/0.13um RFCMOS components and independently developed the building blocks necessary for RF transceivers. RichWave transceiver technologies include RF base band, MAC, and system on a chip. We offer customized design services for systems in the niche non-standard market and we quickly and effectively provide customers with comprehensive solutions that meet market requirements from RF, base band, and MAC to system integration.

A. Power amplifier (PA)

The power amplifier is an important RF front-end component used for wireless WiFi, mobile phone communication, and related wireless applications. It has evolved from the early GaAs transistor separation component module to the current MMIC PA SOC. In terms of technical trends, Pas must have competitive advantages in digital control, precision power detection, low power consumption, and prices. Therefore, silicon substrate with high integration potential have gradually gained ground in the market. Although GaAs offers high frequency performance, it cannot match silicon in terms of the cost of materials and the yield rate in mass production. Therefore, RichWave has focused on silicon germanium in PA products since the Company was founded. Although silicon germanium technologies have higher entry barriers in RF applications, RichWave's silicon germanium technology has made it one of the few advanced RF front-end PA developers with capacity for both silicon germanium and gallium arsenide production in the international market.

In addition to continuing to maintain competitive advantages based on the characteristics of these two materials, the Company will continue to develop processes with superior price competitiveness and higher integration (e.g., CMOS PAs).

B. Low-noise amplifier (LNA)

The low-noise amplifier is one of the key components for RF front-end Wi-Fi receivers. RichWave's LNAs developed with silicon germanium technologies are cheaper and product development can be integrated with external compatible components. We use MMIC SOC to provide customers with the most competitive solutions on the market. In response to continuous demand for compact multi-band multi-mode products, RichWave's LNAs are mass-produced for the Wi-Fi market and we also launched GPS LNAs with CMOS technology to provide customers with better choices.

C. Switch (SW)

The switch is a key component for RF front-end antennas. RichWave's Wi-Fi antenna switch offers special electrical attributes such as low loss and high linearity. The current antenna products are produced with pHEMT process technology. With advancements in silicon technologies and system integration, RichWave will also develop SOI switches.

D. LTE SW

RichWave launched LTE SW products for mobile phones in 2014 Q4. They include SP4T, SP8T, and SP10T and the Company will continue to provide front-end antenna modules for mobile phones.3G4G3G4G

E. Front-end module (FEM)

The FEM is usually a RF front-end module with a substrate as the vessel and integrates components with different functions on the same chip. Although the technology entry barrier is low and market access can be rapid, the high cost and poor yield rate in production make it difficult to attain long-term market share in a market characterized by price competition. RichWave's RF chip design for front-end module products focuses on zero compatibility, zero substrate, and zero RBOM technologies which offers plug-and-use functions without calibration and significantly reduces the cost to increase competitive advantages.

RichWave is a main RF front-end component supplier in the wireless WiFi market and has attained more than 30% of the market share for the Hz and Hz SPDT and SP3T switches. RichWave is also committed to developing SOI switches with high static protection and the current SOI switches is set to become the mainstream component in the Wi-Fi market.2.4G and 5.8G

RichWave's RF products such as PA, LNA, SW, and FEM incorporate different types of process technologies including GaAs, SiGe, SOI, CMOS, and IPD. We can adopt different process technologies in response to rapid changes in the market to offer products with the highest performance-cost ratio for the market.

RichWave also continues to provide compatible model numbers for main materials used on the market and provide alternative materials where necessary to maximize our customers' market competitiveness. We also actively work with main chip manufacturers to develop materials for next-generation products. We also provide prompt technical services to help customers win higher market shares and generate profits. The main competitors of RichWave's RF front-end components and strength/weakness analysis are provided below.

The competitiveness comparison and SWOT of RichWave and foreign companies in Wi-Fi RF front-end components is as follows:

F. BAW filters

BAW filters are high Q elements, and are crucial elements for Wi-fi 5GHz and Wi-fi 6GHz triple-frequency applications. Richwave's design and mass production technologies developed in-house currently make it the sole supplier of BAW filters in Taiwan.

Competitiveness comparison of RichWave in Wi-Fi RF front-end components

Company	WiFi SW	WiFi PA	WiFi LNA	WiFi FEM
RichWave (RichWave)	Provides switches with high ESD performance for SOI processes	Provides PA with cost advantages for SiGe processes	Provides LNA with cost advantages for SOI processes	Offers GaAs with cost advantages for SiGe/SOI processes
Skyworks	Mainly offers GaAs processes with poor ESD performance	Mainly offers GaAs processes with higher cost	Mainly offers GaAs processes with higher cost	Mainly offers GaAs/pHEMT processes with higher cost
RFMD (Note)	None	None	None	Mainly offers GaAs/pHEMT processes with higher cost

Note: RFMD and TriQuint merged to form a new company called Qorvo

(III) Overview of technology and R&D:

1. R&D expenditures:

Unit: NT$ thousands; %

Item	2021	2022
R&D Expenses (A)	539,010	602,470
Net operating revenue (B)	5,316,267	3,429,371
(A)/(B)	10.1%	17.6%

2. Technologies and products successfully developed in the past year:

Year	R&D results
2004	1. CMOS Synthesizer + VCO single chip 400-2500MHz
2005	1. SiGe PA for 802.11b/g (used for PC and AP router)
	2. CMOS ISM Band AV transceiver
2006	1. SiGe PA for 802.11b/g pre-n (used for PC, NB, and consumer electronics)
	2. GaAs PA for 802.11b/g pre-n (used for USB, NB, and D)SC
	3. CMOS Cordless phone transceiver
2007	1. PA for (used for TV, NB, and USB)802.11a
	2. Dual band PA for /b/g/n (used for dual-mode PC, TV, NB, and USB)802.11a
	3. CMOS dual band 2.4GHz/5.8GHz AV transceiver
2008	1. Small form factor & low current PA for 802.11b/g/n (used for mobile phone)
	2. CMOS 900MHz AV transceiver
2009	1. SPDT & SP3T T/R switch for /b/g/n (used for mobile phone, NB, and USB)802.11a
	2. MMIC SiGe LNA for 802.11b/g/n (used for NB and consumer electronics)
	3. High power PA for 802.11b/g/n (used for AP router)
	4. RF Front-end module for 802.11b/g/n (used for mobile phone)
	5. FM radio single chip (used for mobile phone and MP3)
2010	1.2.3~2.7GHz WiMAX PA (used for WiMAX, USB, and CPE)
	2. High power PA for /n (used for AP router)802.11a
	3. Zero BOM SiGe & GaAs PA for /n (used for NB, TV, USB)802.11a
	4. RF Front-end module for /b/g/n (used for NB, TV, consumer electronics, and USB)802.11a
	5. CMOS Digital AV Transceiver Solution (used for monitoring system)
	6. WiFi Front-end for Cellular System (used for smart phone)
2011	1. Multi-Switch for satellite (used for satellite)
2012	1. LTE Femto PA for all bands (used for small base stations for family use)4G
	2. 3GFemto PA for all bands (used for small base stations for family use)3G
	3. SP10 / SP4T ASM (used for smart phones and Internet cards)3G
	4. 2.4GHz wireless car rear view system (used for wireless rear view system)
	5. 2.4GHz Wireless HDMI System (used for wireless audio and video transmission)
2013	1. RF front-end module for (used for NB, TV, and USB)802.11ac

Year	R&D results
	2. 4x2 LNB SW (used for satellite receivers)
	3. 2x2 LNB SW (used for satellite receivers)
	4. 4T1R wireless security system with IP feature (used for wireless surveillance system)
	5. SOI SP2T - SP3T high static protection switch
2014	1. SOI SP4T - SP10T high static protection switch for mobile phone
	2. 12GHz LNB down converter (satellite receiver SOC)
	3. High power PA for routers (used for AP router)802.11ac
	4. FEM with wafer level chip scale packaging (WLCSP) (used for mobile phone)
	5. 46/49 Mhz SOC (used for baby monitor)
	6. Mono FM digital receiver without crystal
2015	1. SOI High power 2.4/5GHz dual-band SW for 802.11ac (used for AP router)
	2. SOI High power SOC RX FEM for 802.11ac (used for AP router)
	3. WLCSP CMOS LTE LNA & GPS LNA (used for mobile phone)
	4. High power 5GHz PA for 802.11ac (used for AP router)
	5. FM digital receiver with on wire control
2016	1. Automotive Grade SOI High isolation SW (used for automotive applications)
	2. Multiple on path WiFi SW for AOA application (used for mobile phone)
	3. High power 5GHz FEM for 802.11ac (used for AP router)
	4. SOC WiFi FEM (used for AP router & mobile phone)
2017	1. Antenna Tuning SW (used for mobile phone)
	2. MIPI interface High throw SW (used for mobile phone)
	3. High power 2.4GHz FEM for 802.11ac (used for AP router)
	4. Bypass mode LTE LNA (used for mobile phone)
	5. WLCSP LTE LNA+SW integration (used for mobile phone)
2018	1. 802.11ax FEM (used for AP router and enterprise)
	2. Automotive Grade WiFi FEM for 802.11p (used for automotive applications)
	3. CATV SW (used for cable DOSIS 3.1 and DOSIS 3.0)
	4. Bluetooth FEM (used for BT and IoT)
2019	1. Cost-effective SW and LNA (used for LTE mobile phone)
	2. L5 GPS LNA and SAW filter (used for IoT/GPS)
	3. High power 802.11ax FEM (used for AP router)
	4. uW sensor (used for IoT/motion detection)
	5. Duplexer and SAW filter (used for 5G/LTE mobile applications)
	6. 6GHz wide band 802.11ax FEM (used for WiFi 6 wave 2)
2020	1. New FM IC (digital output) shipping in Samsung Flagship Phone
	2. WiFi 6 7GHz switch launched to market
	3. Automotive 5GHz/2GHz FEMs qualified by Cypress

Year	R&D results
	4. WiFi 6 FEM got AVL by MTK mobile platform
	5. 10GHz CW/FMCW radar front-end launched for engineering sample to customers
	6. 10GHz CW/FMCW radar SoC launched for engineering sample to customer
	7. WiFi 6 5GHz/2GHz FEMs qualified by Quantenna
	8. GPS SAW filter, B24 TX/RX filter design win in Satellite IOT Market
	9. WiFi 6 2.4GHz/5GHz FEM got AVL by MTK AP Router Platform
	10. WiFi 6 2.4GHz/5GHz FEM got AVL by Realtek AP Platform
	11. RichWave Automotive quality system qualified by Murata
	12. The Non-linear 2.4GHz/5GHz PA launched to WiFi 6 AP Router market
2021	1. WiFi 6 2.4GHz/5GHz dual-FEM lunched to WiFi Mobile market
	2. WiFi 6 2.4GHz/5GHz FEM with directional coupler lunched to WiFi AP Router market
	3. WiFi 6E 6GHz RF FEM lunched to WiFi AP Router market
	4. IoT/BLE and IoT/Zigbee RF FEM design win in Europe carrier brand customer
	5. WiFi 6E High power SPDT switch design win in Enterprise brand customer
	6.WiFi6E for mobile phones enters mass production.
2022	1.WiFi 7 2.4GHz RF FEM lunched to AP Router market
	2.WiFi 7 5GHz RF FEM lunched to AP Router market
	3.WiFi 7 6GHz RF FEM lunched to AP Router market
	4.High isolation DPDT passed AVL qualification on WiFi 7 mobile platform of brand third party
	5.WiFi 2.4G/5G Diplexer lunched to AP Router market
	6.WiFi 2.4G/6G Diplexer lunched to AP Router market
	7.L1/L5 GPS SAW diplexer filter lunched to IoT/GPS market
	8.2.4G PA for NB-Iot, LoRa application
	9.Antenna SPDT/DPDT Switch lunched to AP Router market
	10.5G LTE SPDT Switch design in Module market
	11.Wifi High Power SPDT/SP3T Switch lunched to AP Router market
	12.GPS LNA design win in IOT/Module market
	13.2.4G/5G BAW filter lunched to AP Router market
	14.2.4G Bluetooth FEM lunched to IOT/BT market

(IV) Long and Short-Term Business Development Plans:

(1) Short-term development plan:

A. Research and development strategy

a. Follow information, communication, and consumer electronic product market development trends and develop wireless products to meet customer demands and expand the market share in market application products.

b. Make good use of technical knowledge accumulated by the Company to create technical differentiation, maintain our existing products, develop cost reduction methods, and develop other product lines for the market. Improve product quality and enhance the competitiveness of products.

B. Production and sales strategy

a. Use Taiwan's unique vertical division of labor and manufacturing capabilities to provide customized and flexible operations. Work with domestic wafer plants and packaging and testing plants to maintain close OEM services, ensure access to production capacity and timely delivery of products, and meet customer and market demand.

b. Develop cooperation and build trust with customers, provide rapid and trustworthy technical services, and use distributors and agents to penetrate all parts of the market to improve profits and the market share of the product.

C. Business and financial planning strategies

a. Attach importance to employee welfare policies and implement a bonus and merit-based reward system to boost employee morale and increase their motivation.

(2) Long-term development plans:

A. Research and development strategy

a. Respond to market application demand and provide a comprehensive range of products. Expand the breadth and depth of the product lines and use more advanced technologies to develop high-end products to diversify products and satisfy customers' market demand.

b. Seek technical exchanges with domestic and foreign academic institutions and leverage the long-term strategic partnership with system companies to create the Company's unique technical brand.

c. Create long-term partnerships with main chip manufacturers to facilitate early development, reference designs for platform deployment, and expand market share.

B. Production and sales strategy

a. Continue to maintain long-term partnerships with upstream foundry, packaging, and testing companies and become their strategic partners for joint development of processes with special niches, reduce production cost, and develop high-quality and competitive products.

b. Grasp key technologies and optimize product applications for more advanced and precise product integration and development. Become a world-class leader in the industry.

C. Business and financial planning strategies

a. Expand internationalization ideals and cultivate business management capabilities for international companies. Actively cultivate international talents to become a world-class company.

b. Use a diverse range of wealth management tools in the capital market to strengthen the Company's financial structure based on long-term business growth. Use comprehensive and diverse fundraising channels to create the most suitable fund demand portfolio to support the Company's operations and development.

II. Market, Production and Sales

(I) Market analysis:

1. Areas for the sales (supply) of main products (services):

Unit: NT$ thousands; %

Sales region		2021		2022	
		Amount	Percentage (%)	Amount	Percentage (%)
Domestic sales		2,314,013	43.53	1,692,598	49.36
Export sales	China	2,564,560	48.24	1,336,767	38.98
	Asia	407,219	5.50	233,541	6.81
	Others	30,475	2.73	166,465	4.85
Total		5,316,267	100.00	3,429,371	100.00

2. Market share:

In the past, the domestic semiconductors industry lacked RFIC design talents. The shortage was particularly severe in the power amplifier sector. Domestic IC design companies are relatively weaker in RFIC products as the market is dominated by a handful of American and Japanese companies. RichWave shipped an average of more than 78 million RFIC FEMs each month in 2022 and shipped more than 938 billion units in 2022. According to the TRI report, the compound annual growth rate of the global Wi-Fi market will be approximately 20%. A certain percentage of the demand will be Wi-Fi products with low power consumption requirements. The power amplifier product, switch, or other RF front-end components have been built into the main chip. Devices connected to external RF front-end components generally require 4-6 components due to the system design, main chip platform, and installation cost. . As Wi-Fi has been widely adopted for consumer products, the system design specifications change rapidly. There has been no market research reports and the calculation of the market share is based on the information collected by RichWave's internal marketing department from system companies. We estimate that RichWave's Wi-Fi product shipments in 2021 will account for approximately 14% of the global market share. As Taiwan's RFIC industry technologies matured in recent years, the Company has used the close technical cooperation between the technical teams, customers, and suppliers to develop and design RFIC products that meet the demands of domestic system companies for integration and price competitiveness. We will gradually increase the global market share of domestic RFIC.

3. Future market supply, demand and growth:

More than 80% of the world’s WiFi products are provided by system manufacturers in mainland China and Taiwan, making it one of the most successful industries in Greater China. Due to the high design difficulty of RF parts such as PA, LNA, and SW, the features must be adjusted according to client needs after integration into modules. Domestically, only Richwave uses the advanced material SiGe process to design PA and the SOI process to design SW. Our technical capability has reached an economic scale, our output has continued to increase steadily, and we firmly occupy a spot in the fiercely competitive international market. As the use of WiFi has become increasingly popular for wireless communication products such as smartphones, the introduction of new wireless communication products continued to accelerate, and the performance efficiency continued to improve; the demands for RF products such as radiofrequency front-end modules (FEM) and antenna switches (SW) will continue to soar. At present, no publicly listed company supplies PA and antenna switch products in Taiwan, and our Company’s products can gradually change the market that was originally 100% monopolized by foreign manufacturers.

Although WiFi has matured, the technology is still evolving to provide innovation for multimedia wireless transmission applications and handheld devices. According to an In-Stat research report, WiFi has spread in various fields such as fixed consumer electronic products (i.e., smart TV, game consoles), portable consumer electronic products (i.e., smart cameras, pads), computer peripherals (i.e., printers), notebook computers, smartphones, and the medical industry. In particular, smartphone are the fastest growing and biggest carriers of Wi-Fi electronic products. As smartphone applications continue to develop into new domains (such as smart family and smart health applications), developers' efforts will stimulate even greater demand and growth.

According to a forecast from the research organization TRI, the Wi-fi Certified 6 (IEEE 802.11ax standard) certification plan announced by the Wi-Fi Alliance on September 16, 2019 calls for evolution from Wi-Fi 802.11b to 802.11ax (Wi-fi 6) over the course of 20 years, which has attracted considerable attention from the market and promises to stimulate increased revenue in relevant industry chains. Furthermore, Wi-Fi 6E's extra bandwidth will provide greater capacity, while also maintaining forward compatibility. Because of this, the transition to Wi-Fi 6/6E is expected to get fully underway in 2022. The development of new generation Wi-Fi 7 began in May 2019. No formal version of Wi-Fi 7 has as yet been released; preliminary specifications were confirmed in May 2021, and the Wi-Fi Alliance will now integrate the technical proposals of all Alliance members. It is expected that a formal version will be confirmed at some time between November 2023 and May 2024, after which products making practical application of the specification will be introduced to the market. According to a forecast from the market survey organization IDC, the global Wi-Fi product market will have a compound annual growth rate (CAGR) of 9.3% between 2022 and 2027, which will stimulate steady growth in overall demand for RF IC RF chips.

Smallcell, also known as femtocell or access point base station, plays an important role in Fixed-mobile Convergence (FMC). A mobile communication network comprises many small wireless units (cells), namely base stations. Depending on their location or application, each base station may have different coverage, system capacity, and output power. According to their coverage (or output power), they are classified into macrocells, microcells, picocells, and femtocells. Micro and ultra-micro base stations are mainly aimed at dense mobile phone usage areas such as stations or shopping malls to increase network capacity. Femtocell covers a smaller area. It is mainly used to make up for areas that other base stations cannot cover or increase data transmission rates and is usually used in residential or small commercial environments. The base stations under Microcell are collectively referred to as Smallcell.

The WiFi as a Service (WaaS) market has emerged as WiFi technology advances. WaaS is based on the market demand for using WiFi wireless network communication technology to provide user-side services. It includes the WiFi hardware infrastructure and the services provided by WiFi deployment according to different business needs. The vertical field applications extended by different business needs such as education, retail, tourism and hospitality, healthcare, transportation and logistics, IT and telecommunications, manufacturing, financial services and insurance, government, and public sector can all serve as applications for wireless network deployment. At present, the application fields of the global WaaS service market in North America and Europe have benefited from the mature WaaS technology, which will show a relatively stable growth trend in the future. Due to the growth of SMBs in the Asia-Pacific region, the WaaS market growth rate reached 35% in 2020, with a market scale of US$980 million. Between 2020 and 2025, the compound annual growth rate is 27.7%, ranking first among the regional market shares worldwide.

4. Competitive niches:

A. Outstanding R&D and technology capabilities:

As the first professional RFIC design company in Taiwan to utalize SiGe process and launch PA mass production, RichWave has gained advantages over competition with global GaAs manufacturers with cost-effective and high-performance RFIC front-end modules. The Company has focused on RFIC since its establishment. High-quality human resource has been the foundation of development. With rich R&D talents, we have accumulated significant levels of technology and experience. Our R&D team provides global IC design industry with rich IC design resources. Also, it lies at the heart of our competitiveness and growth. In addition, the broad applications and longer product life cycle of wireless communication products serve beneficail for future development.

B. Management of foundry source and long-term partnership:

Foundries' process, yield, capacity, delivery, and price are all contributing factors for our competitiveness and sales sucess. Long-term cooperation with assembly and testing partners are also indispensable. the Company has maintained long-term partnership with suppliers to ensure stability in quatlity and supply.

C. Maintain close partnerships with customers:

The Company's marketing and sales team provides customers with comprehensive product development services. We offer better prices and can better meet the current market demands in terms of quality, yield, delivery, and after-sales services. We also maintain good relations with our customers to help them shorten their product development time. We strive to grow together with customers and maintain long-term relations. The marketing channels and strong customer relationships we established help enpower the Company's future operations and development.

5. Favorable and unfavorable factors for future development and strategies:

(1) Favorable factors:

a. Room for growth in the RFIC industry

RFIC applications will become increasingly widespread due to the continuous advancement of information technology, increased penetration of portable devices such as mobile phones, Wi-Fi, and digital video/audio products and contents, launch of low-cost computers, development of the Internet, and advancement in semiconductor process miniaturization technologies. They will invariably increase the overall market demand in the RFIC industry and create potential for future growth.

b. Wireless communication industry standards are not easily changed after different forms of certification are implemented

Due to the differences between various wireless communication industry standards and R&D technologies encompassing software and hardware sectors, small businesses with flexibility may benefit from market niches if they can rapidly respond in individual markets and avoid price wars waged for standard products. In addition, the design and development of RFIC products often requires extensive experience and accumulation of fault detection technologies. The system companies also require longer certification time and suppliers are not easily changed after they are certified. Therefore, domestic companies cannot replace the Company as suppliers within a short period of time. The Company's technical team has accumulated multiple years of experience in R&D in related sectors. It can thus shorten the learning curve and create entry barriers.

(2) Unfavorable factors and response strategies:

a. Rising cost of professional RFIC personnel and shortage of R&D personnel in Taiwan

The rapid development of the IC industry has increased the relative cost of professional manpower. In addition, the long duration of RFIC design professionals and the long-term focus on digital technologies as opposed to analog technologies in Taiwan means that domestic colleges, universities, and graduate institute only train a limited number of professional RFIC designers each year. Changes in market products have accelerated and talent cultivation cannot meet demand.

Response strategies:

The Company recruits talent on campus and organizes training to increase employee welfare, strengthen employees' sense of cohesion, reduce turnover, and enhance the development skills of R&D talents. We also develop more advanced process databases to improve the Company's core competitiveness and win more opportunities for working with customers.

b. High reliance on foundries

Due to the vertical division of labor and integration in the semiconductor industry, the upstream and downstream industries can be roughly divided into IC design, foundry services, cutting and packaging plants, and testing plants. They are closely interconnected.

Response strategies:

We maintain good interactions with downstream foundries to ensure the production capacity of foundry services and actively develop other foundry services to reduce risks.

c. Competition with domestic and foreign companies

The main global RFIC suppliers can be categorize into main chips and RFIC supplier. The former mainly provides RF, base baseband IC, and software solutions. Players include Qualcomm, Broadcom, Infineon, Marvell, MTK, Spreadtrum Communications, HiSilicon, and Realtek. The latter provides RFIC and players are Skyworks, RFMD (Qorvo), and Avago.

Leading RFIC companies such as Skyworks, RFMD (Qorvo), and Avago have gained significant market shares in the mobile phone industry with only power amplifiers. They have also captured at least 60% of the global mobile phone PA market. However, whether such IDM companies can withstand fluctuations in price in the overall wireless communication industry has become questionable.

Under current price competition, RFIC plants must face the challenge of maintaining their market share in the ever-growing mid to low-tier smart phone market. CMOS design that offers cost-effective solutions has become the choice for semiconductor industry. The energy-saving design with optimized multiple bands and multiple modes has also become a key in the next phase of development in the RFIC market.

Response strategies:

(a) Strengthen the Company's product R&D capabilities and reduce the time required to launch new products.

(b) Stabilize the quality of supply and control the production capacity to strengthen the confidence of customers.

(c) Strengthen cooperation with domestic and foreign system manufacturers to develop new products.

(d) Make concrete contributions to improve production yield and reduce the cost of production and sales.

(e) Strengthen marketing management and create a global marketing network and after-sales service system to enhance customer loyalty.

(f) Improve the performance-cost ratio of RFIC products, reduce power consumption, and expand into RFIC applications beyond mobile phones such as WLAN and GPS. Develop multiple highly integrated wireless communication RFIC solutions and provide comprehensive RF sub-system solutions.

(II) Important Applications and Manufacturing Processes of Major Products:

1. Important applications of major products:

RF front-end component	Name	Basic functions
PA	Power amplifier	The RF front-end component used for the transmitting path that amplifies the high-frequency signals sent by the RF transceiver for transmission via the antenna. It must have high linearity, high efficiency, digital controls, power inspection, and a small footprint to meet broadband and high-speed demands of the wireless communication system.
LNA	Low-noise amplifier	The RF front-end component used for the receiving path that amplifies the weak signals received by the antenna amid high levels of background noise and transmits the signal to the subsequent RF transceiver for frequency reduction and base band coordination. Noise Figure (NF) is an important trait.
SW	Switch	The switch is the RF front-end component that is closest to the antenna. It functions by switching between the connection or disconnection of the transmission or reception paths of the antenna based on the control signal to attain the time-division multiplexing function for regular system transmission and reception.
FEM	Front-end module	The FEM integrates active and passive RF front-end components for RF transmission and reception paths to form an SOC RF front-end module. Its composition may include active components such as the PA, LNA, and switch, and other passive components such as filters and couplers. Different system applications often include different combination requirements. Therefore, the RF front-end module often requires customized design.

RFIC transceiver	Product positioning	Basic product functions
2.4GHz digital frequency-hopping RFIC transceiver	It is a smart home surveillance system used to create an Hz wireless frequency hopping digital video/audio transmission system. It integrates the peer-to-peer (P2P) software suite developed by RichWave and smart phone apps to allow users to monitor home security and care for the elderly, infants, and young children through smart remote wireless connections with Wi-Fi.2.4G3G4G	1.2.41. Uses 2.4GHz digital frequency hopping to transmit CVBS and compressed video and audio signals for surround sound. 2. Supports MPEG4 and MP3 video and audio compression and decompression. 3. Retains Internet connection functions to provide smart phones and tablets with remote storage and playing functions. 4. Four-to-one transmission monitoring and bidirectional audio transmission, file transmission, and management functions. 5. Interference-resistance and confidential digital frequency hopping transmission with line-of-sight propagation to transmit standard resolution video feeds that can replace CCTV market specifications and price demand.250m

2. Manufacturing process:

Market survey → IC design → Mask production → Wafer fabrication → Wafer probing → Packaging/testing

(III) Supply Status of Main Materials:

Main material	Main supplier	Supply status
Wafer	Supplier A	Good
Wafer	Supplier B	Good
Wafer	Supplier C	Good

(IV) Names of suppliers who accounted for more than 10% of the purchases of the Company in the past two years, and the ratio to total purchases:

Unit: NT$ thousands; %

	2021				2022			
Item	Name	Amount	Percentage of net purchases of the year (%)	Relationship with the issuer	Name	Amount	Percentage of net purchases of the year (%)	Relationship with the issuer
1	Supplier A	1,325,999	61%	—	Supplier A	567,180	58%	—
2	Supplier B	292,129	13%	—	Supplier B	204,728	21%	—
3	Supplier C	414,247	19%	—	Supplier C	120,316	12%	—
4	Others	156,434	7%	—	Others	85,670	9%	—
	Net purchases	2,188,809	100%		Net purchases	977,894	100%	

Reasons for the change: The Company selects professional wafer foundries based on manufacturing process capabilities, production capacity, and price and there were no changes in major suppliers in the past two years.

(V) Names of customers who accounted for more than 10% of the sales in the past two years, and sales as a percentage of total sales:

Unit: NT$ thousands; %

	2021				2022			
Item	Name	Amount	Percentage of net sales of the year (%)	Relationship with the issuer	Name	Amount	Percentage of net sales of the year (%)	Relationship with the issuer
1	Customer A	2,270,845	43%	—	Customer A	1,943,334	57%	—
2	Customer B	1,004,302	19%	—	Customer B	456,367	13%	—
3	Customer C	739,079	14%	—	Customer C	271,103	8%	—
4	Others	1,302,041	24%	—	Others	758,567	22%	—
	Net sales	5,316,267	100%		Net sales	3,429,371	100%	

(VI) Output volume and value for the past two years:

Unit: thousand units; NT$ thousands

Year / Output quantity and value / Main product	2021			2022		
	Production capacity	Production volume	Production value	Production capacity	Production volume	Production value
Wi-Fi products	—	1,361,276	3,761,849	—	858,019	2,272,347
Other products	—	207,265	239,597	—	125,982	124,005
Total	—	1,568,541	4,001,446	—	984,001	2,396,352

(VII) Sales volume and value for the past two years:

Unit: thousand units; NT$ thousands

Year / Sales volume/value / Main product	2021				2022			
	Domestic sales		Export sales		Domestic sales		Export sales	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Wi-Fi	636,427	2,257,166	652,658	2,781,597	471,869	1,655,357	414,508	1,621,597
Others	19,588	56,847	171,744	220,657	15,501	37,241	121,630	115,176
Total	656,015	2,314,013	824,402	3,002,254	487,370	1,692,598	536,138	1,736,773

III. Information on employees

Number of employees in the past two years as of Apr. 20, 2022

Year		2021	2022	As of Apr. 20, 2023
Number of employees (person)	Manufacture and Production	0	0	0
	RD	179	189	189
	Saless and administration	121	117	118
	Total	300	306	307
Average age (year)		40.8	40.9	40.9
Average years of service (years)		4.3	4.7	4.7
Distribution of academic qualifications (%)	Dotoral	5%	5%	5%
	master	43%	50%	50%
	bachelor	41%	39%	39%
	high school	9%	6%	6%
	below high school	0	0%	0%

IV. Environmental Protection Expenditure

Total losses (including damage awards) and fines for environmental pollution in the two most recent fiscal years, and as of the publication date of the Annual Report, and explanations of the measures and possible disbursements to be made in the future: None.

V. Labor Relations

(I) Employee welfare measures, continuing education, training, retirement system and implementation status:

1. Employee welfare measures:

The Company funds the Employee Welfare Fund in accordance with related regulations and we organized the Employees' Welfare Committee to plan, oversee and implement employees' benefits. Employees enjoy gift coupons (allowances) for the three traditional holidays and the year-end bonus. The Company also provides marriage, funeral, hospitalization, and childbirth subsidies to take care of employees' lives. In addition to providing employees with labor and health insurance in accordance with the Labor Standards Act and related regulations, the Company also provides employees with group medical insurance, cancer insurance, and accident insurance to provide employees with better coverage.

2. Employees continuing education and training: The Company organizes internal and external training based on work requirements.
3. Retirement system and its implementation status:

The Company has established retirement regulations for official employees and has established the Labor Pension Supervisory Committee in accordance with the Labor Standards Act. The Company makes monthly pension contributions equivalent to a certain percentage of employees' gross salaries. Contributions are made to the Labor Pension Supervisory Committee and are deposited into separate accounts in the Bank of Taiwan.

The appropriation system is adopted starting from the implementation of the Labor Pension Act on July 1, 2005. After the implementation of the appropriation system, employees may choose to adopt regulations on pension specified in the "Labor Standards Act" or use the pension system of the Enforcement Rules of the Labor Standards Act and retain the number of years of service prior to the implementation of the Enforcement Rules. For employees eligible for the pension system, the Company shall set aside no less than 6% of their wages to their personal labor pension account each month in accordance with the Labor Pension Act.

(II) Employer-employee agreements and protection of employees' rights and interests:

1. Negotiations between employer and employees:

The Company follows all labor laws and related regulations in all matters. Both employees and the employer follow rules stipulated in the work contract, work regulations and various management regulations. The Company has enjoyed harmonious relations between employees and the employer since its founding and there have been no major employee-employer disputes or losses.

2. Protection of employees' rights and interests:

The Company has established comprehensive regulations governing the rights, obligations and benefits of employees to safeguard employee rights and interests.

(III) List the losses suffered due to labor disputes in the most recent fiscal year up to the publication date of this annual report, and disclose the estimated amount for current and possible future occurrences, and response measures. If the amount cannot be reasonably estimated, clarify the reason:

The Company has enjoyed harmonious relations between employees and the employer since its founding and there have been no major labor-management disputes or losses. We shall continue to enhance communication between the two parties to achieve company prosperity and safeguard employees' welfare with the aim of reducing the occurrence of employee-employer disputes with through peaceful and reasonable means.

VI. Information Community Security Management

(I) Describe the information community security risk management framework, the information community security policy, the specific management plan, and the resources invested in information community security management.

1. Information Community Security Risks Management Framework:

2. Information Community Security Policy:

Richwave has established the "Information Security Risk Management Policy and Procedures," which was approved by the board of directors on December 23, 2021 to ensure that the information services provided by the Company can be used stably and that the confidentiality, integrity, and availability of information assets related to employees, suppliers, and customers can be effectively protected. This policy governs the cycle count of the Company's information assets, information security promotion, corporate confidentiality, information equipment maintenance and backup, personal computer security system maintenance, and information security incident notification to ensure the sustainable operation of the Company's information businesses.

The Company has established information security management procedure documents to ensure the security and accuracy of electronic data of various systems and to achieve the policy objective of continuous normal operation of the Company's business. This policy covers all the company's system data and information equipment. It expressly regulates the Company's information security control operations (including access control, file management, and anti-virus measures), data processing operations, information equipment management and maintenance operations, form filling operations, and form retention periods. The goal is to ensure that the Company's system can be effectively controlled at different levels; important data can be properly secured, reviewed, and audited; and the information system can be fully protected and backed up. Moreover, the Company has regularly established data backup systems to conduct disaster recovery drills and construct an effective information security protection environment according to the information security system to ensure the sustainable operation of the enterprise.

3. The specific management plan and the resources invested in information community security:

Operation Item	Operation Content
Information Equipment Management	● We have established a regular annual cycle count of information assets, conduct risk management based on information security risk assessment, and implement various control measures.
Information Security Promotion and Implementation	● The Company regularly performs information security promotions and conducts information security education and training at least once a year, and new employees are required to sign information non-disclosure agreements. ● All employees shall comply with legal regulations and information security policy requirements, and management shall supervise the implementation of the information security compliance system to strengthen employees' awareness of information security and legal concepts.
Software Management	● Anti-virus software should be installed on personal computers and virus code updates should be checked regularly, and the use of unauthorized software should be prohibited.
Password Protection	● The accounts, passwords and authorizations of employees should be kept and used with due diligence and changed regularly.
Information Security Incident Management	● We have established standard procedures for responding to and notifying information security incidents, so that information security incidents can be handled immediately to prevent the expansion of damage.
Supplier Information Security Control	● All employees of the Company, outsourced vendors, and their partner vendors shall sign a non-disclosure declaration to ensure that those who use the Company's information to provide information services or perform related information business have the responsibility and obligation to protect the Company's information assets acquired or used by them from unauthorized access, unauthorized alteration, destruction, or improper disclosure.
Data Backup	● Critical information systems or equipment shall have appropriate backup or monitoring mechanisms in place which shall be regularly rehearsed at least once a year to maintain their applicability.

(II) List the losses, possible impacts, and countermeasures due to major information community security incidents in the most recent year and as of the publication date for this annual report. If it cannot be reasonably estimated, state why it cannot be reasonably estimated.

In 2022 and as of the publication date for this annual report, no major information security incident has occurred or led to major losses.

VII. Important Contracts

Nature of contract	Counterparty	Term	Major contents	Re-strictions
Lease	Fubon Life Insurance Co., Ltd.	2021.05.01-2024.05.31	Lease of Neihu office	None
Lease	Jung Pei Technology Co., Ltd.	2020.08.01-2023.07.31	Lease of Hsinchu office	None
Lease	Chia Feng Investment Co., Ltd.	2023.04.01-2028.03.31	Lease of Hsinchu office	None
Lease	Tai Yuan Investment Co., Ltd.	2023.04.01-2028.03.31	Lease of Hsinchu office	None
Lease	Santa Teresa Village, LLC	2021.05.01-2024.04.30	Lease of United States of-fice	None
Wafer foundry	Advanced Wireless Semicon-ductor Company	2009.03.02~ Till one party terminates the agreement	Wafer Foundry Agreement	None
Wafer foundry	Dongbu Hitek Co., Ltd	2014.05.01-2024.05.01	Agreement for Long-Term Relationship	None
Wafer foundry	GLOBALFOUNDRIES U.S. Inc.	2020.04.30-2023.04.30	Custom Sales Agreement	None
Outsourced pro-cessing	Sigurd Microelectronics Corpo-ration	2011.05.03 Till one party terminates the agreement with 2-month notice	Integrated Circuit Pro-cessing and Packaging Agreement	None
Outsourced pro-cessing	Lingsen Precision Industries, Ltd.	2010.01.04~ Till one party terminates the agreement	Integrated Circuit Pro-cessing and Packaging Agreement	None
Outsourced pro-cessing	Advanced Semiconductor Engi-neering, Inc.	2010.05.26~ Till one party terminates the agreement	Integrated Circuit Pro-cessing and Packaging Agreement	None

Chapter VI. Financial Information

I. Condensed Balance Sheets and Statements of Comprehensive Income for the Past Five Fiscal Years

(I) Condensed balance sheets for the past five fiscal years:

1. Condensed balance sheet - consolidated:

Unit: NT$ thousands

Item \ Year		Financial data for the past five fiscal years (Note1)				
		2018	2019	2020	2021	2022
Current assets		1,725,134	2,168,060	3,425,735	2,811,097	3,092,539
Property, plant, and equipment		85,761	109,112	128,771	192,678	189,182
Intangible assets		21,229	20,241	18,551	24,934	14,876
Other assets		51,522	85,880	88,151	274,456	151,397
Total assets		1,883,646	2,383,293	3,661,208	3,303,165	3,447,994
Current liabilities	Before distribution	702,196	996,007	1,455,059	872,290	771,831
	After distribution	792,760	1,116,192	1,707,827	562,649	(Note2)
Non-current liabilities		6,886	18,685	20,863	33,011	303,513
Total liabilities	Before distribution	709,082	1,014,692	1,475,922	905,301	1,075,344
	After distribution	799,646	1,134,877	1,728,690	595,660	(Note2)
Equity attributable to parent company shareholders		1,174,564	1,368,601	2,185,285	2,397,864	2,372,650
Share capital		603,761	619,511	631,921	884,689	901,689
Capital reserve		276,847	355,743	415,180	416,354	626,298
Retained earnings	Before distribution	294,030	393,749	1,139,285	1,098,194	844,350
	After distribution	203,466	273,564	633,749	788,553	(Note2)
Other equity		(74)	(402)	(1,100)	(1,373)	313
Treasury stock		0	0	0	0	0
Non-controlling interest		0	0	0	0	0
Total equity	Before distribution	1,174,564	1,368,601	2,185,286	2,397,864	2,372,650
	After distribution	1,084,000	1,248,416	1,932,518	2,088,223	(Note2)

Note 1: Audited and attested by the CPA.

Note 2: The 2022 earnings distribution proposal has not yet been passed in the shareholders' meeting.

2. Condensed balance sheet - parent company only:

Unit: NT$ thousands

Item / Year		Financial data for the past five fiscal years (Note 1)				
		2018	2019	2020	2021	2022
Current assets		1,708,239	2,153,766	3,412,241	2,783,431	3,027,318
Property, plant, and equipment		85,761	109,112	128,771	190,251	184,910
Intangible assets		21,229	20,241	18,551	24,934	14,876
Other assets		51,522	100,174	101,645	302,602	216,026
Total assets		1,883,646	2,383,293	3,661,208	3,301,218	3,443,130
Current liabilities	Before distribution	702,196	996,007	1,455,059	872,960	767,699
	After distribution	792,760	1,116,192	1,707,827	563,319	(Note 2)
Non-current liabilities		6,886	18,685	20,863	30,394	302,781
Total liabilities	Before distribution	709,082	1,014,692	1,475,922	903,354	1,070,480
	After distribution	799,646	1,134,877	1,728,690	593,713	(Note 2)
Equity attributable to parent company shareholders		1,174,564	1,368,601	2,185,286	2,397,864	2,372,650
Share capital		603,761	619,511	631,921	884,689	901,689
Capital reserve		276,847	355,743	415,180	416,354	626,298
Retained earnings	Before distribution	294,030	393,749	1,139,285	1,098,194	844,350
	After distribution	203,466	273,564	633,749	788,553	(Note 2)
Other equity		(74)	(402)	(1,100)	(1,373)	313
Treasury stock		0	0	0	0	0
Non-controlling interest		0	0	0	0	0
Total equity	Before distribution	1,174,564	1,368,601	2,185,286	2,397,864	2,372,650
	After distribution	1,084,000	1,248,416	1,932,518	2,088,223	(Note 2)

Note 1: The Company's financial information for the past five fiscal years were audited and certified by the CPA.

Note 2: The 2022 earnings distribution proposal has not yet been passed in the shareholders' meeting.

(II) Statement of comprehensive income for the past five fiscal years.

1. Condensed statement of comprehensive income - consolidated:

Unit: NT$ thousands

Item / Year	Financial data for the past five fiscal years				
	2018	2019	2020	2021	2022
Operating revenue	2,650,169	2,749,555	5,350,200	5,316,267	3,429,371
Gross operating profit	865,117	984,678	1,898,267	1,546,032	1,058,590
Operating profit or loss	201,169	243,234	1,007,952	533,608	(17,205)
Non-operating income and expenses	12,934	511	9,155	(6,702)	78,494
Pre-tax profit	214,103	243,745	1,017,107	526,906	61,289
Continuing operations Current period net profit	214,103	243,745	1,017,107	526,906	61,289
Loss from discontinued operations	-	-	-	-	-
Net income (loss) of this period	177,185	190,737	866,216	465,517	55,059
Other comprehensive income of the period (net income after-tax)	(419)	(782)	(1,193)	(1,345)	2,425
Total comprehensive income of the period	176,766	189,955	865,023	464,172	57,484
Net profit attributable to parent company shareholders	177,185	190,737	866,216	464,517	55,059
Net profit attributable to non-controlling interest	0	0	0	0	0
Total comprehensive income attributed to the owners of the parent company	176,766	189,955	865,023	464,172	57,484
Total comprehensive income attributed to non-controlling equity	0	0	0	0	0
Earnings per share	2.93	3.13	9.87 (Note2)	5.26	0.62

Note 1: Audited and attested by the CPA.

Note 2: Earnings per share after retrospective adjustment.

2. Condensed statement of comprehensive income - parent company only:

Unit: NT$ thousands

Item \ Year	Financial data for the past five fiscal years (Note 1)				
	2018	2019	2020	2021	2022
Operating revenue	2,650,169	2,749,555	5,350,200	5,316,267	3,429,200
Gross operating profit	865,117	984,678	1,898,267	1,546,032	1,058,535
Operating profit or loss	201,169	245,516	1,008,041	537,934	(18,693)
Non-operating income and expenses	12,934	(1,771)	9,066	(11,028)	79,979
Pre-tax profit	214,103	243,745	1,017,107	526,906	61,286
Continuing operations Current period net profit	214,103	243,745	1,017,107	526,906	61,286
Loss from discontinued operations	-	-	-	-	-
Net income (loss) of this period	177,185	190,737	866,216	465,517	55,059
Other comprehensive income of the period (net income after-tax)	(419)	(782)	(1,193)	(1,345)	2,425
Total comprehensive income of the period	176,766	189,955	865,023	464,172	57,484
Net profit attributable to parent company shareholders	177,185	190,737	866,216	465,517	55,059
Net profit attributable to non-controlling interest	0	0	0	0	0
Total comprehensive income attributed to the owners of the parent company	176,766	189,955	865,023	464,172	57,484
Total comprehensive income attributed to non-controlling equity	0	0	0	0	0
Earnings per share	2.93	3.13	9.87(Note2)	5.26	0.62

Note 1: The Company's financial information for the past five fiscal years were audited and certified by the CPA.

Note 2: Earnings per share after retrospective adjustment.

(III) The names of CPA conducting financial audits in the past five fiscal years and their audit opinions:

Year	CPA Firm	CPA	Audit Opinions
2018	Deloitte, Taiwan	Su-Li Fang, Cheng-Chih Lin	Unqualified opinion
2019	Deloitte, Taiwan	Tung-Hui Yeh, Cheng-Chih Lin	Unqualified opinion
2020	Deloitte, Taiwan	Tung-Hui Yeh, Cheng-Chih Lin	Unqualified opinion
2021	Deloitte, Taiwan	Tung-Hui Yeh, Cheng-Chih Lin	Unqualified opinion
2022	Deloitte, Taiwan	Jian-Ming Zeng, Su-Li Fang,	Unqualified opinion

Note: Reason for the replacement of CPAs in the past five fiscal years: Internal rotation of the CPA firm.

II. Financial Analyses for the Past Five Fiscal Years

1. Financial analysis - consolidated:

Descriptions	Year	Financial Analyses for the Past Five Fiscal Years(Note1)				
		2018	2019	2020	2021	2022
Financial structure (%)	Liabilities to assets ratio	37.64	42.58	40.31	27.41	31.19
	Long-term working capital to real estate, plants and equipment ratio	1,377.61	1,271.43	1,713.23	1,261.63	1,414.60
Solvency (%)	Current ratio	245.68	217.68	235.44	322.27	400.68
	Quick ratio	177.85	156.57	149.19	160.90	271.82
	Times interest earned	144.31	178.92	996.21	438.27	13.54
Operating ability	Accounts receivable turnover rate (times)	4.20	4.13	5.31	5.30	3.81
	Average cash collection days	86.91	88.38	68.74	68.87	95.80
	Inventory turnover rate (times)	3.87	3.32	3.67	2.84	2.06
	Accounts payable turnover rate (times)	4.53	3.53	4.28	6.24	7.55
	Average days required for sales	94.32	109.94	99.46	128.52	177.18
	Property, plant, and equipment turnover ratio (times)	35.84	28.22	44.98	33.08	17.96
	Aggregate total asset turnover rate (times)	1.50	1.29	1.77	1.53	1.02
Profitability	Return on assets (%)	10.11	8.99	28.69	13.40	1.75
	Return on equity (%)	16.17	15.00	48.75	20.31	2.31
	Ratio of net profit before tax to paid-in capital (%)	35.46	39.34	160.95	59.56	6.80
	Net profit margin (%)	6.69	6.94	16.19	8.76	1.61
	Earnings per share (NT$)	2.93	3.13	9.87(Note2)	5.26	0.62
Cash flow	Cash flow ratio (%)	44.77	23.03	19.61	18.50	48.22
	Cash flow adequacy ratio (%)	105.08	86.96	57.87	40.71	56.42
	Cash reinvestment ratio (%)	22.61	9.57	7.23	(3.61)	2.19
Leverage	Operating leverage	2.94	2.66	1.53	2.07	(37.00)
	Financial leverage	1.01	1.01	1.00	1.00	0.78

Analysis of causes for changes in various financial ratios in the 2 most recent years (for changes exceeding 20%):

1. Solvency: Mainly due to the decrease net profit after tax of the current year.
2. Operating ability: Mainly due to the decrease in net profit after tax of the current year.
3. Profitability: Mainly due to an decrease in net profit after tax of the current year.
4. Cash flow: Mainly due to the decrease in net profit after tax of the current year, and destocking on 2022 year..
5. Decrease in operating leverage: The decrease was caused by the revenue.

Note 1: Audited and attested by the CPA.

Note 2: Earnings per share after retrospective adjustment..

The calculation formula for the items of analysis is stated below:

1. Financial structure
   (1) Liabilities to asset ratio = total liabilities/total assets.
   (2) Long-term working capital to property, plants and equipment ratio = (total equity + non-current liabilities)/net amount of property, plant, and equipment.
2. Solvency
   (1) Current ratio = current assets/current liabilities.
   (2) Quick ratio = (current assets - inventory - prepaid expenditures)/current liabilities.
   (3) Interest protection multiples = income before income tax and interest expenditure / interest expenditures for this period.
3. Operating ability
   (1) Accounts receivable(including notes receivables from operating activities and accounts receivable) turnover rate = net sales／average balance of accounts receivable(including notes receivables from operating activities and accounts receivable) in various terms.
   (2) Average cash collection days = 365／Accounts receivable turnover rate.
   (3) Inventory turnover rate = Sales costs／Average amount of inventory.
   (4) Accounts payable (including notes payable from operating activities and accounts payable) turnover rate = sales costs／average balance of accounts payable (including notes payable from operating activities and accounts payable) of various terms.
   (5) Average days required for sales＝365／Inventory turnover rate.
   (6) Property, plant, and equipment turnover rate = net sales / average net property, plant, and equipment.
   (7) Total asset turnover rate = net sales / average total assets.
4. Profitability
   (1) Return on assets = [net income + interest expenses (1- tax rate)] / average total assets.
   (2) Return on equity = net income after tax / average total equity.
   (3) Net profit margin = net income / net sales.
   (4) Earnings per share = (income attributable to owners of parent company – dividends on preferred stock) / weighted average number of shares issued.
5. Cash flow
   (1) Cash flow ratio = net cash flow from operating activities / current liabilities.
   (2) Net cash flow adequacy ratio = net cash flow from operating activities for the last five years / (capital expenditures + inventory additions + cash dividends) for the last five years.
   (3) Cash reinvestment ratio = (net cash flow from operating activities - cash dividends) / (gross property, plant and equipment + long-term investments + other non-current assets + working capital).
6. Leverage:
   (1) Operating leverage = (net operating income – variable operating cost and expenses) / operating income.
   (2) Financial leverage = operating income / (operating income – interest expenses).

2. Financial analysis - parent company only:

Descriptions	Year	Financial Analyses for the Past Five Fiscal Years (Note 1)				
		2018	2019	2020	2021	2022
Financial structure (%)	Liabilities to assets ratio	37.64	42.58	40.31	27.36	31.09
	Long-term working capital to real estate, plants and equipment ratio	1,377.61	1,271.43	1,713.23	1,276.34	1,446.88
Solvency (%)	Current ratio	243.27	216.24	234.51	318.85	394.34
	Quick ratio	175.44	155.14	145.27	157.98	265.23
	Times interest earned	144.31	178.92	996.21	454.45	13.88
Operating ability	Accounts receivable turnover rate (times)	4.20	4.13	5.31	5.30	3.81
	Average cash collection days	86.91	88.38	68.74	68.87	95.80
	Inventory turnover rate (times)	3.87	3.32	3.67	2.84	2.06
	Accounts payable turnover rate (times)	4.53	3.53	4.28	6.24	7.55
	Average days required for sales	94.32	109.94	99.45	128.52	177.18
	Property, plant, and equipment turnover ratio (times)	35.84	28.22	44.98	33.33	18.28
	Aggregate total asset turnover rate (times)	1.50	1.29	1.77	1.53	1.02
Profitability	Return on assets (%)	10.11	8.99	28.69	13.40	1.75
	Return on equity (%)	16.17	15.00	48.75	20.31	2.31
	Ratio of net profit before tax to paid-in capital (%)	35.46	39.34	160.95	59.56	6.80
	Net profit margin (%)	6.69	6.94	16.19	8.76	1.61
	Earnings per share (NT$)	2.93	3.13	9.87 (Note 2)	5.26	0.62
Cash flow	Cash flow ratio (%)	44.77	23.29	19.66	19.88	47.41
	Cash flow adequacy ratio (%)	105.08	87.21	58.06	41.42	56.84
	Cash reinvestment ratio (%)	22.30	9.66	7.22	(3.08)	1.86
Leverage	Operating leverage	2.94	2.65	1.53	2.07	(31.41)
	Financial leverage	1.01	1.01	1.00	1.00	0.80

Analysis of causes for changes in various financial ratios in the 2 most recent years (for changes exceeding 20%):

1. Solvency: Mainly due to the decrease net profit after tax of the current year.
2. Operating ability: Mainly due to the decrease in net profit after tax of the current year.
3. Profitability: Mainly due to an decrease in net profit after tax of the current year.
4. Cash flow: Mainly due to the decrease in net profit after tax of the current year, and destocking on 2022 year..
5. Decrease in operating leverage: The decrease was caused by the revenue.

Note 1: The Company's financial information for the past five fiscal years were audited and certified by the CPA.

Note 2: Earnings per share after retrospective adjustment.

The calculation formula for the items of analysis is stated below:

1. Financial structure
   (1) Liabilities to asset ratio = total liabilities/total assets.
   (2) Long-term working capital to property, plants and equipment ratio = (total equity + non-current liabilities)/net amount of property, plant, and equipment.
2. Solvency
   (1) Current ratio = current assets/current liabilities.
   (2) Quick ratio = (current assets - inventory - prepaid expenditures)/current liabilities.
   (3) Interest protection multiples = income before income tax and interest expenditure / interest expenditures for this period.
3. Operating ability
   (1) Accounts receivable(including notes receivables from operating activities and accounts receivable) turnover rate = net sales／average balance of accounts receivable(including notes receivables from operating activities and accounts receivable) in various terms.
   (2) Average cash collection days = 365／Accounts receivable turnover rate.
   (3) Inventory turnover rate = Sales costs／Average amount of inventory.
   (4) Accounts payable (including notes payable from operating activities and accounts payable) turnover rate = sales costs／average balance of accounts payable (including notes payable from operating activities and accounts payable) of various terms.
   (5) Average days required for sales＝365／Inventory turnover rate.
   (6) Property, plant, and equipment turnover rate = net sales / average net property, plant, and equipment.
   (7) Total asset turnover rate = net sales / average total assets.
4. Profitability
   (1) Return on assets = [net income + interest expenses (1- tax rate)] / average total assets.
   (2) Return on equity = net income after tax / average total equity.
   (3) Net profit margin = net income / net sales.
   (4) Earnings per share = (income attributable to owners of parent company – dividends on preferred stock) / weighted average number of shares issued.
5. Cash flow
   (1) Cash flow ratio = net cash flow from operating activities / current liabilities.
   (2) Net cash flow adequacy ratio = net cash flow from operating activities for the last five years / (capital expenditures + inventory additions + cash dividends) for the last five years.
   (3) Cash reinvestment ratio = (net cash flow from operating activities - cash dividends) / (gross property, plant and equipment + long-term investments + other non-current assets + working capital).
6. Leverage:
   (1) Operating leverage = (net operating income – variable operating cost and expenses) / operating income.
   (2) Financial leverage = operating income / (operating income – interest expenses).

III. Supervisors' Committee Report for the Most Recent Fiscal Year's Financial Statement

Audit Committee's Review Report

The Company's Board of Directors prepared the 2022 Business Report, financial statements, and earnings distribution table. The financial statements were audited by Jian-Ming Zeng, CPA, and Su-Li Fang, CPA, of Deloitte, Taiwan and they have prepared an Audit Report. The Audit Report was reviewed by the Audit Committee who found them to be compliant with regulations. The Audit Report is therefore provided in accordance with Article 14-4 of the Securities and Exchange Act and Article 219 of the Company Act and filed for your review.

To

2023 General Shareholders' Meeting of RichWave Technology Corporation

RichWave Technology Corporation

Chairman of the Audit Committee: Chia-Ying Ma

February 23, 2023

IV. Financial Statements for the Most Recent Fiscal Year

INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders
Richwave Technology Corp.

Opinion

We have audited the accompanying consolidated financial statements of Richwave Technology Corp. and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated balance sheets as of December 31, 2022 and 2021, and the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and the notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2022 and 2021, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China.

Basis for Opinion

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

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the year ended December 31, 2022. 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.

<u>Revenue Recognition</u>

According to auditing standards in the Republic of China, there is an inherent risk of fraud in revenue recognition. Management may be under pressure to achieve their targets and attempt to inflate sales figures. The main source of revenue for Richwave Technology Corp. is sales of WIFI products. The net revenue for the year ended December 31, 2022 was $3,429,371 thousand. For the accounting policies on revenue recognition, please refer to Notes 4 (l), 22 and 34 of the consolidated financial statements.

Affected by the decline in market demand for the year ended December 31, 2022, Richwave Technology Corp.'s overall net revenue decreased by 35% compared with the year ended December 31, 2021. Therefore, the sales revenue generated by specific sales clients who had not experienced a significant decline in sales or whose sales growth this year are considered potential fraud. Therefore, revenue recognition has been identified as a key audit matter for the year ended December 31, 2022.

In response to the aforementioned key audit matter, we understood the Group's internal controls on the approval of sales orders and its delivery procedures, tested the operating effectiveness of these controls, selected samples and tested the validity of occurrence of the sales transactions, checked for discrepancies between the counterparties of the sales transactions and the parties paying off the receivables, as well as for abnormalities in the payments received after the reporting period.

Other Matter

We have also audited the parent company only financial statement of Richwave Technology Corp. as of and for the years ended December 31, 2022 and 2021 on which we have issued an unmodified opinion.

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

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

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

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

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

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

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

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

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

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

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

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

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

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements for the year ended December 31, 2022 and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audits resulting in this independent auditors' report are Jian-Ming Zeng and Su-Li Fang.

Deloitte & Touche
Taipei, Taiwan
Republic of China

February 23, 2023

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.

RICHWAVE TECHNOLOGY CORP. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2022 AND 2021
(In Thousands of New Taiwan Dollars)

	2022		2021	
ASSETS	**Amount**	**%**	**Amount**	**%**
CURRENT ASSETS				
Cash and cash equivalents (Notes 6 and 28)	$ 1,015,303	30	$ 641,340	19
Accounts receivable, net (Notes 9, 22 and 28)	1,046,374	30	752,673	23
Other receivables (Notes 9 and 28)	36,337	1	9,511	-
Inventories (Note 10)	927,493	27	1,373,460	42
Prepayments (Note 15)	56,718	2	27,586	1
Other current assets (Note 15)	10,314	-	6,527	-
Total current assets	3,092,539	90	2,811,097	85
NON-CURRENT ASSETS				
Financial assets at amortized cost - non-current (Notes 8, 28 and 30)	12,900	-	110,000	3
Property, plant and equipment (Note 12)	189,182	6	192,678	6
Right-of-use assets (Notes 13)	28,250	1	59,461	2
Other intangible assets (Note 14)	14,876	-	24,934	1
Deferred tax assets (Note 24)	94,744	3	83,269	3
Prepaid equipment	6,690	-	8,902	-
Refundable deposits (Note 28)	7,248	-	12,786	-
Net defined benefit assets - non-current (Note 20)	1,565	-	38	-
Total non-current assets	355,455	10	492,068	15
TOTAL	$ 3,447,994	100	$ 3,303,165	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term borrowings (Notes 16 and 28)	$ -	-	$ 200,000	6
Accounts payable (Notes 18 and 28)	388,724	11	239,208	7
Accrued compensation of employees and remuneration of directors (Note 23)	6,061	-	52,111	2
Other payables (Notes 19 and 28)	149,809	4	155,918	5
Current tax liabilities (Note 24)	11,476	-	10,803	-
Lease liabilities - current (Notes 13 and 28)	22,828	1	31,932	1
Refund liabilities - current (Notes 19 and 22)	185,465	6	171,618	5
Other current liabilities (Notes 19 and 22)	7,468	-	10,700	-
Total current liabilities	771,831	22	872,290	26
NON-CURRENT LIABILITIES				
Financial liabilities at fair value through profit or loss - non-current (Notes 7 and 28)	480	-	-	-
Bonds payable (Notes 17 and 28)	286,293	9	-	-
Deferred tax liabilities (Note 24)	9,391	-	-	-
Lease liabilities - non-current (Notes 13 and 28)	5,747	-	28,246	1
Guarantee deposits (Note 28)	1,602	-	4,765	-
Total non-current liabilities	303,513	9	33,011	1
Total liabilities	1,075,344	31	905,301	27
EQUITY (Notes 21 and 26)				
Share capital				
Ordinary shares	901,689	26	884,689	27
Capital surplus	626,298	18	416,354	13
Retained earnings				
Legal reserve	207,114	6	160,670	5
Special reserve	1,373	-	1,101	-
Unappropriated earnings	635,863	19	936,423	28
Total retained earnings	844,350	25	1,098,194	33
Other equity	313	-	(1,373)	-
Total equity	2,372,650	69	2,397,864	73
TOTAL	$ 3,447,994	100	$ 3,303,165	100

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

RICHWAVE TECHNOLOGY CORP. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
(In Thousands of New Taiwan Dollars, Except Earnings Per Share, in New Taiwan Dollars)

	2022		2021	
	Amount	**%**	**Amount**	**%**
NET REVENUE (Note 22)	$ 3,429,371	100	$ 5,316,267	100
OPERATING COSTS (Notes 10 and 23)	2,370,781	69	3,770,235	71
GROSS PROFIT	1,058,590	31	1,546,032	29
OPERATING EXPENSES (Notes 20 and 23)				
Selling and marketing expenses	217,837	6	233,442	4
General and administrative expenses	243,362	7	240,954	5
Research and development expenses	602,470	18	539,010	10
Expected credit loss (gain) (Note 9)	12,126	-	(982)	-
Total operating expenses	1,075,795	31	1,012,424	19
PROFIT (LOSS) FROM OPERATIONS	(17,205)	-	533,608	10
NON-OPERATING INCOME AND EXPENSES (Note 23)				
Interest income	10,627	-	1,940	-
Other income	1,013	-	2,317	-
Other gains and losses	71,741	2	(9,754)	-
Finance costs	(4,887)	-	(1,205)	-
Total non-operating income and expenses	78,494	2	(6,702)	-
PROFIT BEFORE INCOME TAX	61,289	2	526,906	10
INCOME TAX EXPENSE (Note 24)	6,230	-	61,389	1
NET PROFIT FOR THE YEAR	55,059	2	465,517	9
OTHER COMPREHENSIVE INCOME (LOSS)				
Items that will not be reclassified subsequently to profit or loss:				
Remeasurement of defined benefit plans (Note 20)	924	-	(1,340)	-
Income tax related to items that will not be reclassified subsequently to profit or loss (Note 24)	(185)	-	268	-

(Continued)

RICHWAVE TECHNOLOGY CORP. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
(In Thousands of New Taiwan Dollars, Except Earnings Per Share, in New Taiwan Dollars)

	2022		2021	
	Amount	**%**	**Amount**	**%**
Items that may be reclassified subsequently to profit or loss:				
Exchange differences on translation of the financial statements of foreign operations (Note 21)	$ 1,686	-	$ (273)	-
Other comprehensive income (loss) for the year, net of income tax	2,425	-	(1,345)	-
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	$ 57,484	2	$ 464,172	9
EARNINGS PER SHARE (Note 25)				
Basic	$ 0.62		$ 5.26	
Diluted	$ 0.62		$ 5.25	

(Concluded)

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

RICHWAVE TECHNOLOGY CORP. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

	Share Capital			Retained Earnings			Other Equity			
	Number of Shares (In Thousands)	Ordinary Shares	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings	Unrealized Valuation Gain (Loss) on Financial Assets at Fair Value Through Other Comprehensive Income	Exchange Differences on Translation of the Financial Statements of Foreign Operations	Total	Total Equity
BALANCE AT JANUARY 1, 2021	63,192	$ 631,921	$ 415,180	$ 74,098	$ 402	$ 1,064,785	$ (14)	$ (1,086)	$ (1,100)	$ 2,185,286
Appropriation of 2020 earnings										
Legal reserve	-	-	-	86,572	-	(86,572)	-	-	-	-
Special reserve	-	-	-	-	699	(699)	-	-	-	-
Cash dividends distributed by the Company	-	-	-	-	-	(252,768)	-	-	-	(252,768)
Share dividends distributed by the Company	25,277	252,768	-	-	-	(252,768)	-	-	-	-
Net profit for the year ended December 31, 2021	-	-	-	-	-	465,517	-	-	-	465,517
Other comprehensive loss for the year ended December 31, 2021 , net of income tax	-	-	-	-	-	(1,072)	-	(273)	(273)	(1,345)
Share-based payment expenses recognized	-	-	1,174	-	-	-	-	-	-	1,174
BALANCE AT DECEMBER 31, 2021	88,469	884,689	416,354	160,670	1,101	936,423	(14)	(1,359)	(1,373)	2,397,864
Appropriation of 2021 earnings										
Legal reserve	-	-	-	46,444	-	(46,444)	-	-	-	-
Special reserve	-	-	-	-	272	(272)	-	-	-	-
Cash dividends distributed by the Company	-	-	-	-	-	(309,642)	-	-	-	(309,642)
Due to recognition of equity component of convertible bonds issued	-	-	28,500	-	-	-	-	-	-	28,500
Net profit for the year ended December 31, 2022	-	-	-	-	-	55,059	-	-	-	55,059
Other comprehensive gain for the year ended December 31, 2022 , net of income tax	-	-	-	-	-	739	-	1,686	1,686	2,425
Share-based payment expenses recognized	-	-	22,569	-	-	-	-	-	-	22,569
Issue of shares	1,700	17,000	158,875	-	-	-	-	-	-	175,875
BALANCE AT DECEMBER 31, 2022	90,169	$ 901,689	$ 626,298	$ 207,114	$ 1,373	$ 635,863	$ (14)	$ 327	$ 313	$ 2,372,650

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

RICHWAVE TECHNOLOGY CORP. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
(In Thousands of New Taiwan Dollars)

	2022	2021
CASH FLOWS FROM OPERATING ACTIVITIES		
Profit before income tax for the year	$ 61,289	$ 526,906
Adjustments for:		
Depreciation expense	104,331	88,414
Amortization expense	30,458	27,059
Expected credit loss (reversed)	12,126	(982)
Net loss on fair value changes of financial liabilities at fair value through profit or loss	780	-
Finance costs	4,887	1,205
Interest income	(10,627)	(1,940)
Share-based payment expenses recognized	22,569	1,174
Loss on disposal of property, plant and equipment	218	-
Profit from lease modification	(627)	(4)
Write-down of inventories	50,144	136,140
Net loss (gain) on foreign currency exchange	(50,719)	4,488
Changes in operating assets and liabilities:		
Accounts receivable	(308,157)	507,680
Other receivables	(25,393)	19,785
Inventories	395,823	(229,180)
Net defined benefit assets	(603)	(604)
Prepayments	(29,132)	(14,672)
Other current assets	(3,787)	(1,347)
Refund liabilities	13,847	86,229
Accounts payable	152,819	(735,763)
Other payables	2,764	34,101
Accrued compensation of employees and remuneration of directors	(46,050)	(48,482)
Contract liabilities	(4,011)	(4,025)
Other current liabilities	779	2,509
Cash generated from operations	373,728	398,691
Interest received	9,194	2,062
Interest paid	(2,912)	(1,028)
Income tax paid	(7,826)	(238,370)
Net cash generated from operating activities	372,184	161,355

(Continued)

RICHWAVE TECHNOLOGY CORP. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
(In Thousands of New Taiwan Dollars)

	2022	2021
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of financial assets at amortized cost	$ (9,900)	$ (107,000)
Proceeds from disposal of financial assets at amortized cost	107,000	-
Purchase of property, plant and equipment	(65,956)	(126,097)
Proceeds from disposal of property, plant and equipment	14	-
Increase in refundable deposits	-	(2,692)
Decrease in refundable deposits	5,538	-
Purchase of other intangible assets	(30,963)	(38,669)
Net cash from (used) in investing activities	5,733	(274,458)
CASH FLOWS FROM FINANCING ACTIVITIES		
Increase in short-term borrowings	1,060,000	400,000
Decrease in short-term borrowings	(1,260,000)	(200,000)
Proceeds from issuing convertible bonds	312,341	-
Decrease in guarantee deposits	(3,647)	-
Repayment of the principal portion of lease liabilities	(30,657)	(32,003)
Cash dividends paid	(309,642)	(252,768)
Proceeds from issuing shares	175,875	-
Net cash used in financing activities	(55,730)	(84,771)
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	51,776	(5,051)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	373,963	(202,925)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	641,340	844,265
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	$ 1,015,303	$ 641,340

(Concluded)

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

RICHWAVE TECHNOLOGY CORP. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

1. GENERAL INFORMATION

Richwave Technology Corp. (the "Company") was incorporated in the Republic of China (ROC) in January 2004. The Company is mainly engaged in the design and sale of integrated circuits (ICs) for wireless communication products. The Company's shares have been listed on the Taiwan Stock Exchange (TWSE) since November 2015.

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

Richwave Technology Corp. and its subsidiaries are collectively referred to as the "Group" hereinafter.

2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Company's board of directors on February 23, 2023.

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

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

   Except for the following, the initial application of the IFRSs endorsed and issued into effect by the FSC did not have any material impact on the Group's accounting policies.

b. Amendments to the IFRSs issued by International Accounting Standards Board (IASB) and endorsed by the FSC with effective date starting 2023

New, Amended and Revised Standards and Interpretations	Effective Date Announced by IASB
Amendments to IAS 1 "Disclosure of Accounting Policies"	January 1, 2023 (Note 1)
Amendments to IAS 8 "Definition of Accounting Estimates"	January 1, 2023 (Note 2)
Amendments to IAS 12 "Deferred Tax related to Assets and Liabilities arising from a Single Transaction"	January 1, 2023 (Note 3)

Note 1: The amendments will be applied prospectively for annual reporting periods beginning on or after January 1, 2023.

Note 2: The amendments will be applicable to changes in accounting estimates and changes in accounting policies that occur on or after the beginning of the annual reporting period beginning on or after January 1, 2023.

Note 3: Except for deferred taxes that were recognized on January 1, 2022 for temporary differences associated with leases and decommissioning obligations, the amendments were applied prospectively to transactions that occur on or after January 1, 2022.

As of the date the consolidated financial statements were authorized for issue, the Group has assessed that the application of other standards and interpretations will not have a material impact on the Group's financial position and financial performance.

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

New, Amended and Revised Standards and Interpretations	Effective Date Announced by IASB (Note 1)
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"	To be determined by IASB
Amendments to IFRS 16 "Leases Liability in a Sale and Leaseback"	January 1, 2024 (Note 2)
IFRS 17 "Insurance Contracts"	January 1, 2023
Amendments to IFRS 17	January 1, 2023
Amendments to IFRS 17 "Initial Application of IFRS 9 and IFRS 17 - Comparative Information"	January 1, 2023
Amendments to IAS 1 "Classification of Liabilities as Current or Non-current"	January 1, 2024
Amendments to IAS 1 "Non-current Liabilities with Covenants"	January 1, 2024

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

Note 2: A seller-lessee shall apply the Amendments to IFRS 16 retrospectively to sale and leaseback transactions entered into after the date of initial application of IFRS 16.

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

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

a. Statement of compliance

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

b. Basis of preparation

The consolidated financial statements have been prepared on the historical cost basis except for financial instruments that are measured at fair value and net defined benefit assets which are measured at the present value of the defined benefit obligation less the fair value of plan assets.

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

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

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

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

c. Classification of current and non-current assets and liabilities

Current assets include:

1) Assets held primarily for the purpose of trading;

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

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

Current liabilities include:

1) Liabilities held primarily for the purpose of trading;

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

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

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

d. Basis of consolidation

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

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

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

See Note 11, Table 2 and Table 3 for detailed information on subsidiaries (including percentages of ownership and main businesses).

e. Foreign currencies

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

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

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

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

For the purpose of presenting the consolidated financial statements, the functional currencies of the Company's foreign operations (including subsidiaries in other countries or those that use currencies different from the currency of the Company) are translated into the presentation currency, the New Taiwan dollar, as follows: Assets and liabilities are translated at the exchange rates prevailing at the end of the reporting period; income and expense items are translated at the average exchange rates for the period. The resulting currency translation differences are recognized in other comprehensive income.

f. Inventories

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

g. Property, plant and equipment

Property, plant and equipment are initially measured at cost and subsequently measured at cost less accumulated depreciation and accumulated impairment loss.

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

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

h. Intangible assets

1) Intangible assets acquired separately

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

2) Derecognition of intangible assets

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

i. 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, excluding goodwill, to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

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

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

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

j. Financial instruments

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

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

1) Financial assets

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

a) Measurement categories

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

Financial assets at amortized cost

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

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

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

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

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

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

ii) Financial assets that are not credit-impaired on purchase or origination but has subsequently become credit impaired, for which interest income is calculated by applying the effective interest rate to the amortized cost of such financial assets in subsequent reporting periods.

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

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

ii) Breach of contract, such as a default;

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

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

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

b) Impairment of financial assets

The Group recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including accounts receivable).

The Group always recognizes lifetime Expected Credit Losses (ECLs) for accounts receivable.

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

The impairment loss of all financial assets is recognized in profit or loss by reduction in their carrying amounts through a loss allowance account, except for investments in debt instruments that are measured at FVTOCI, for which the loss allowance is recognized in other comprehensive income and the carrying amounts of the financial assets are not reduced.

c) Derecognition of financial assets

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

On derecognition of a financial asset at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. On derecognition of an investment in an equity instrument at FVTOCI, the cumulative gain or loss that had been recognized in other comprehensive income is transferred directly to retained earnings, without recycling through profit or loss.

2) Equity instruments

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

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

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

3) Financial liabilities

a) Subsequent measurement

Except the following situations, all financial liabilities are measured at amortized cost using the effective interest method:

i. Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when such financial liabilities are either held for trading or are designated as at FVTPL.

Financial liabilities held for trading are stated at fair value, and any remeasurement gains or losses on such financial liabilities are recognized in other gains or losses.

b) Derecognition of financial liabilities

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

4) Convertible bonds

The component parts of convertible bonds issued by the Group are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

On initial recognition, the fair value of the liability component is estimated using the prevailing market interest rate for similar non-convertible instruments. This amount is recorded as a liability on an amortized cost basis using the effective interest method until extinguished upon conversion or upon the instrument's maturity date. Any embedded derivative liability is measured at fair value.

The conversion option classified as equity is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognized and included in equity, net of income tax effects, and is not subsequently remeasured. In addition, the conversion option classified as equity will remain in equity until the conversion option is exercised; in which case, the balance recognized in equity will be transferred to capital surplus - share premiums. When the conversion option remains unexercised at maturity, the balance recognized in equity will be transferred to capital surplus - share premiums.

Transaction costs that relate to the issuance of the convertible notes are allocated to the liability and equity components in proportion to the allocation of the gross proceeds. Transaction costs relating to the equity component are recognized directly in equity. Transaction costs relating to the liability component are included in the carrying amount of the liability component.

k. Provisions

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

l. Revenue recognition

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

The sale of goods is recognized as revenue when the goods are delivered to the customers' specific location or when the goods are shipped because it is the time when the customer has full discretion over the manner of distribution and price to sell the goods, has the primary responsibility for sales to future customers and bears the risks of obsolescence. Accounts receivable are recognized concurrently.

The Group does not recognize revenue on materials delivered to subcontractors because this delivery does not involve a transfer of control.

m. Leases

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

1) The Group as lessor

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

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

2) The Group as lessee

Except for short-term leases and low-value asset leases which are recognized as expenses on a straight-line basis over the lease terms, the Group recognizes right-of-use assets and lease liabilities for all leases at the commencement date of a lease.

Right-of-use assets are initially measured at cost, which comprises the initial measurement of lease liabilities adjusted for lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs needed to restore the underlying assets, and less any lease incentives received. Subsequently, the right-of-use assets are 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, and payments of penalties for terminating a lease if the lease term reflects such termination, less any lease incentives receivable. The lease payments are discounted using the interest rate implicit in a lease, if that rate can be readily determined. If implicit rate cannot be readily determined, the Group uses the lessee’s incremental borrowing rate.

Subsequently, lease liabilities are measured at amortized cost using the effective interest method, with interest expense recognized over the lease terms. When there is a change in a lease term or a change in future lease payments resulting from a change in an index or 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.

n. Borrowing costs

Borrowing costs directly attributable to an acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

Other than those stated above, all other borrowing costs are recognized in profit or loss in the period in which they are incurred.

o. Employee benefits

1) Short-term employee benefits

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

2) Retirement benefits

Payments to defined contribution retirement benefit plans are recognized as expenses when employees have rendered services entitling them to the contributions.

Defined benefit costs (including service cost, net interest and remeasurement) under defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost (including current service cost) and net interest on the net defined benefit liabilities (assets) are recognized as employee benefits expense in the period in which they occur. Remeasurement, comprising actuarial gains and losses and the return on plan assets (excluding interest), is recognized in other comprehensive income in the period in which it occurs. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

Net defined benefit liabilities (assets) represent the actual deficit (surplus) in the Group’s defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

3) Other long-term employee benefits

Other long-term employee benefits are accounted for in the same way as the accounting required for defined benefit plans except that remeasurement is recognized in profit or loss.

4) Termination benefits

A liability for a termination benefit is recognized at the earlier of when the Group can no longer withdraw the offer of the termination benefit and when the Group recognizes any related restructuring costs.

p. Share-based payment arrangements (employee share options)

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. The expense is recognized in full at the grant date if the grants are vested immediately.

At the end of each reporting period, the Group revises its estimate of the number of employee share options that are expected to vest. The impact of the revision of the original estimates is recognized in profit or loss such that the cumulative expenses reflect the revised estimate, with a corresponding adjustment to capital surplus - employee share options. The grant date of issued ordinary shares for cash which are reserved for employees is the pricing date.

q. Taxation

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

1) Current tax

Income tax payable (refundable) is based on taxable profit (loss) for the year determined according to the applicable tax laws of each tax jurisdiction.

According to the Income Tax Act in the ROC, an additional tax on unappropriated earnings is provided for 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.

2) Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities and the corresponding tax bases used in the computation of taxable profit. If a temporary difference arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit, the resulting deferred tax asset or liability is not recognized.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences and unused loss carryforwards and unused tax credits for purchases of machinery, equipment and technology, research and development expenditures and personal training expenditure to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are recognized only to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting period and recognized to the to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

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

3) Current and deferred taxes for the year

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

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group’s accounting policies, management is required to make judgments, estimations, 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 Group considers the possible impact of the recent development of the COVID-19 and its economic environment implications when making its critical accounting estimates on cash flow projections, growth rate, discount rate, profitability, etc. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised if the revisions affect only that period or in the period of the revisions and future periods if the revisions affect both current and future periods.

Critical Accounting Judgments

a. Lease terms

In determining a lease term, the Group considers all facts and circumstances that create an economic incentive to exercise or not to exercise an option, including any expected changes in facts and circumstances from the commencement date until the exercise date of the option. Main factors considered include contractual terms and conditions for the optional periods, significant leasehold improvements undertaken over the contract term, the importance of the underlying asset to the lessee’s operations, etc. The lease term is reassessed if a significant change in circumstances that are within the control of the Group occurs.

Key Sources of Estimation Uncertainty

a. Lessees' incremental borrowing rates

In determining a lessee's incremental borrowing rate used in discounting lease payments, a risk-free rate for the same currency and relevant duration is selected as a reference rate, and the lessee's credit spread adjustments and lease specific adjustments (such as asset type, secured position, etc.) are also taken into account.

6. CASH AND CASH EQUIVALENTS

	December 31	
	2022	**2021**
Cash on hand	$ 611	$ 588
Demand deposits	661,142	640,752
Cash equivalents		
Time deposits with original maturities of 3 months or less	353,550	-
	$1,015,303	$ 641,340

The market rate intervals of cash and time deposits with original maturities of 3 months or less in the bank at the end of the year were as follows:

	December 31	
	2022	**2021**
Bank balance	0.01%-1.05%	0.01%-0.30%
Time deposits with original maturities of 3 months or less	0.95%-5.02%	-

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31	
	2022	**2021**
Financial liabilities at FVTPL - non-current		
Financial liabilities held for trading		
Derivative financial liabilities (not under hedge accounting)		
Convertible options (Note 17)	$ 480	$ -

8. FINANCIAL ASSETS AT AMORTIZED COST

	December 31	
	2022	**2021**
Non-current		
Time deposits with original maturities of more than 1 year	$ 3,000	$ 100,000
Pledged Certificate of deposit (b)	9,900	10,000
	$ 12,900	$ 110,000

a. The ranges of interest rates for time deposits were approximately 0.76%-1.025% and 0.09%-0.76% per annum as of December 31, 2022 and 2021, respectively.

b. Refer to Note 30 for information relating to investments in financial assets at amortized cost pledged as security.

9. ACCOUNTS RECEIVABLE AND OTHER RECEIVABLES

	December 31	
	2022	2021
Accounts receivable (Note 22)		
At amortized cost		
Gross carrying amount	$ 1,058,574	$ 752,752
Less: Allowance for impairment loss	(12,200)	(79)
	$ 1,046,374	$ 752,673
Other receivables		
Income tax refund receivable	$ 4,976	$ 4,993
Others	31,361	4,518
	$ 36,337	$ 9,511

The average credit period on sales of goods was 30 to 90 days. In order to minimize credit risk, the management of the Group has delegated a team responsible for determining credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In addition, the Group reviews the recoverable amount of each individual trade debt at the end of the year to ensure that adequate allowance is made for possible irrecoverable amounts. In this regard, the management believes the Group's credit risk was significantly reduced.

The Group measures the loss allowance for accounts receivable at an amount equal to lifetime ECLs. The expected credit losses on accounts receivable are estimated using a provision matrix prepared by reference to the past default experience of the customer, the customer's current financial position, economic condition of the industry in which the customer operates and industry outlook. As the Group's historical credit loss experience does not show significantly different loss patterns for different customer segments, the provision for loss allowance based on past due status is not further distinguished according to the Group's different customer base.

The Group writes off an accounts receivable when there is evidence indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery. For accounts receivable that have been written off, the Group continues to engage in enforcement activity to attempt to recover the receivables due. Where recoveries are made, these are recognized in profit or loss.

The following table details the loss allowance of accounts receivable based on the Group's provision matrix.

December 31, 2022

	Not Past Due	1 to 30 Days Past Due	31 to 60 Days Past Due	61 to 90 Days Past Due	91 to 180 Days Past Due	Over 180 Days Past Due	Individual Identification	Total
Expected credit loss rate	0.04%	1.93%	6.53%	6.89%	9.42%	-	100%	
Gross carrying amount	$ 873,168	$ 111,099	$ 25,348	$ 27,769	$ 16,577	$ -	$ 4,613	$ 1,058,574
Loss allowance (Lifetime ECLs)	(318)	(2,140)	(1,654)	(1,914)	(1,561)	-	(4,613)	(12,200)
Amortized cost	$ 872,850	$ 108,959	$ 23,694	$ 25,855	$ 15,016	$ -	$ -	$ 1,046,374

December 31, 2021

	Not Past Due	1 to 30 Days Past Due	31 to 60 Days Past Due	61 to 90 Days Past Due	91 to 180 Days Past Due	Over 180 Days Past Due	Individual Identification	Total
Expected credit loss rate	-	0.02%	3.07%	4.52%	-	100%	-	
Gross carrying amount	$ 737,880	$ 13,285	$ 143	$ 1,439	$ -	$ 5	$ -	$ 752,752
Loss allowance (Lifetime ECLs)	(1)	(3)	(4)	(66)	-	(5)	-	(79)
Amortized cost	$ 737,879	$ 13,282	$ 139	$ 1,373	$ -	$ -	$ -	$ 752,673

The movements of the loss allowance of accounts receivable were as follows:

	For the Year Ended December 31	
	2022	2021
Balance at January 1	$ 79	$ 1,061
Add: Net remeasurement of loss allowance	12,126	-
Less: Amounts written off	(5)	-
Less: Net remeasurement of loss allowance	-	(982)
Balance at December 31	$ 12,200	$ 79

10. INVENTORIES

	December 31	
	2022	2021
Finished goods	$ 259,605	$ 359,010
Work in progress	267,130	323,328
Raw materials	400,758	691,122
	$ 927,493	$1,373,460

The nature of the cost of goods sold is as follows:

	For the Year Ended December 31	
	2022	2021
Cost of inventories sold	$ 2,320,637	$ 3,610,893
Loss on disposal of inventories	-	23,202
Inventory write-downs	50,144	136,140
	$ 2,370,781	$ 3,770,235

11. SUBSIDIARIES

a. Subsidiaries included in the consolidated financial statements

Investor	Investee	Nature of Activities	Proportion of Ownership (%) December 31 2022	2021	Remark
Richwave Technology Corp.	Minerva Technology Co.	Investment	100	100	1, 3
Richwave Technology Corp.	Yinghon Technology Co.	Development, manufacturing and sales of ICs	100	100	2, 3
Minerva Technology Co.	AEGIS LINK CORP.	Selling and marking	100	100	1, 3

Remark:

1) In December 2018, the Company established Minerva Technology Co. in Belize with an investment of USD550 thousand. Minerva Technology Co. reinvested in and established AEGIS LINK CORP. in USA with USD500 thousand in January 2019. For details of the investment refer to Table 2.

2) In May 2021, the Company established Shenzhen Richwave Technology Co. Ltd. in Shen Zhen with an investment of USD 1,000 thousand. Shenzhen Richwave Technology Co. Ltd. was renamed to Yinghon Technology Co. in September 2021. On February 24, 2022, the board of directors approved a capital increase of USD 1,000 thousand to Yinghon Technology Co. Investment Commission, MOEA approved the capital increase on April 14, 2022, and the Company completed the capital increase in June 2022. Information on investments in mainland China please refer to Table 3.

3) Minerva Technology Co., Yinghon Technology Co. and AEGIS LINK CORP. were recognized based on audited financial statements.

12. PROPERTY, PLANT AND EQUIPMENT

	Testing Equipment	Computer Equipment	Other Equipment	Total
Cost				
Balance at January 1, 2022	$ 163,742	$ 19,929	$ 113,721	$ 297,392
Additions	13,181	6,039	44,538	63,758
Disposals	-	(29)	(1,129)	(1,158)
Transfers from prepayments	6,317	-	336	6,653
Effects of foreign currency exchange differences	-	1	28	29
Balance at December 31, 2022	$ 183,240	$ 25,940	$ 157,494	$ 366,674

(Continued)

	Testing Equipment	Computer Equipment	Other Equipment	Total
Accumulated depreciation				
Balance at January 1, 2022	$ 51,759	$ 6,947	$ 46,008	$ 104,714
Depreciation expense	28,522	5,837	39,347	73,706
Disposals	-	(29)	(897)	(926)
Effects of foreign currency exchange differences	-	(1)	(1)	(2)
Balance at December 31, 2022	$ 80,281	$ 12,754	$ 84,457	$ 177,492
Carrying amount at December 31, 2022	$ 102,959	$ 13,186	$ 73,037	$ 189,182
Cost				
Balance at January 1, 2021	$ 110,096	$ 13,070	$ 82,863	$ 206,029
Additions	57,495	7,867	51,353	116,715
Transfers from prepayments	1,592	774	592	2,958
Disposals	(5,441)	(1,783)	(21,089)	(28,313)
Effects of foreign currency exchange differences	-	1	2	3
Balance at December 31, 2021	$ 163,742	$ 19,929	$ 113,721	$ 297,392
Accumulated depreciation				
Balance at January 1, 2021	$ 36,031	$ 4,502	$ 36,725	$ 77,258
Depreciation expense	21,169	4,229	30,371	55,769
Disposals	(5,441)	(1,783)	(21,089)	(28,313)
Effects of foreign currency exchange differences	-	(1)	1	-
Balance at December 31, 2021	$ 51,759	$ 6,947	$ 46,008	$ 104,714
Carrying amount at December 31, 2021	$ 111,983	$ 12,982	$ 67,713	$ 192,678

(Concluded)

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

Testing equipment	6 years
Computer equipment	3-4 years
Other equipment	3-5 years

13. LEASE ARRANGEMENTS

a. Right-of-use assets

	December 31	
	2022	2021
Carrying amount		
Buildings	$ 28,250	$ 59,461

	For the Year Ended December 31	
	2022	2021
Additions to right-of-use assets	$ 5,690	$ 63,535
Depreciation charge for right-of-use assets		
Buildings	$ 30,625	$ 32,645
Income from the subleasing of right-of-use assets (presented in other income)	$ (842)	$ (798)

b. Lease liabilities

	December 31	
	2022	2021
Carrying amount		
Current	$ 22,828	$ 31,932
Non-current	$ 5,747	$ 28,246

Range of discount rate for lease liabilities was as follows:

	December 31	
	2022	2021
Buildings	1.50%	1.50%

c. Material leasing activities and terms

The Group leases buildings for the use of plants, offices and parking spaces with lease terms of 1 to 3 years. The Group does not have bargain purchase options to acquire the leasehold buildings at the end of the lease terms. In addition, the Group is prohibited from subleasing or transferring all or any portion of the underlying assets without the lessor’s consent.

d. Other lease information

	For the Year Ended December 31	
	2022	2021
Expenses relating to short-term leases	$ 7,016	$ 5,425
Total cash outflow for leases	$ (38,182)	$ (38,199)

The Group’s leases of certain parking spaces, offices and staff dormitories qualify as short-term leases.

The Group has elected to apply the recognition exemption and thus, did not recognize right-of-use assets and lease liabilities for these leases.

14. OTHER INTANGIBLE ASSETS

	Computer Software	Specialized Techniques	Trademarks	Total
Cost				
Balance at January 1, 2022	$ 37,593	$ 3,000	$ -	$ 40,593
Additions	19,900	500	-	20,400
Disposals	(14,655)	-	-	(14,655)
Balance at December 31, 2022	$ 42,838	$ 3,500	$ -	$ 46,338
Accumulated amortization				
Balance at January 1, 2022	$ 14,808	$ 851	$ -	$ 15,659
Additions	30,111	347	-	30,458
Disposals	(14,655)	-	-	(14,655)
Balance at December 31, 2022	$ 30,264	$ 1,198	$ -	$ 31,462
Carrying amount at December 31, 2022	$ 12,574	$ 2,302	$ -	$ 14,876
Cost				
Balance at January 1, 2021	$ 40,733	$ 2,488	$ 295	$ 43,516
Additions	31,942	1,500	-	33,442
Disposals	(35,082)	(988)	(295)	(36,365)
Balance at December 31, 2021	$ 37,593	$ 3,000	$ -	$ 40,593
Accumulated amortization				
Balance at January 1, 2021	$ 23,006	$ 1,664	$ 295	$ 24,965
Additions	26,884	175	-	27,059
Disposals	(35,082)	(988)	(295)	(36,365)
Balance at December 31, 2021	$ 14,808	$ 851	$ -	$ 15,659
Carrying amount at December 31, 2021	$ 22,785	$ 2,149	$ -	$ 24,934

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

Computer software	1-6 years
Specialized techniques	10 years
Trademarks	10 years

15. OTHER ASSETS

	December 31	
	2022	2021
Current		
Prepayments		
Prepaid expenses	$ 24,301	$ 26,151
Prepayment for purchases	32,417	1,435
	$ 56,718	$ 27,586
Other current assets		
Temporary payments	$ 10,314	$ 6,527

16. SHORT-TERM BORROWINGS

	December 31	
	2022	2021
Unsecured borrowings		
Line of credit borrowings	$ -	$ 200,000

The effective interest rate of the line of credit borrowings was 1.04% per annum at December 31 2021.

17. BONDS PAYABLE

	December 31	
	2022	2021
Unsecured domestic convertible bonds	$ 300,000	$ -
Less: Discount on bonds payable	(13,707)	-
	$ 286,293	$ -

At July 29, 2022, the Company issued 3 thousand, 0% NTD-denominated unsecured convertible bonds in Taiwan, with an aggregate principal amount of $300,000 thousand. The issue price was based on 104.98% of the face value.

Each bond entitles the holder to convert it into ordinary shares of the Company at a conversion price of $137.2. Conversion may occur at any time between October 30, 2022 and July 29, 2025.

If the closing price of shares for each of 30 consecutive trading days is at least 130% of the conversion price between the 3 months after the share issuance date and the 40th day before the maturity date, the Company may redeem all the outstanding bonds at their principal amount. If the amount outstanding of bonds is less than 10% of the principal amount, the Company may also redeem the outstanding bonds at their principal amount.

Bondholders have the option to notify the Company of their request for bond redemption within 30 days prior to the second anniversary of the issuance date, and the Company should redeem the bonds at face value.

The convertible bonds contain both liability and equity components. The equity component was presented in equity under the heading of capital surplus - options. The effective interest rate of the liability component was 1.81% per annum on initial recognition.

Proceeds from issuance (less transaction costs of $2,610 thousand)	$ 312,341
Redeemable and puttable option component	300
Equity component (less transaction costs allocated to the equity component of $221 thousand)	(28,500)
Liability component at the date of issue (less transaction costs allocated to the liability component of $2,389 thousand)	284,141
Interest charged at an effective interest rate of 1.81%	2,152
Liability component at December 31, 2022	$ 286,293

18. ACCOUNTS PAYABLE

	December 31	
	2022	**2021**
Accounts payable		
Generated from operating activities	$ 388,724	$ 239,208

The average credit period was 30 to 60 days. The Group has financial risk management policies in place to ensure that all payables are paid within the pre-agreed credit terms.

19. OTHER LIABILITIES

	December 31	
	2022	**2021**
Current		
Other payables		
Payables for salaries and bonuses	$ 78,517	$ 66,041
Payables for insurance premium	11,833	11,028
Payables for annual leave	9,127	7,361
Payables for research and design fee	8,343	12,358
Payables for testing fee	8,069	16,709
Payables for purchases of equipment	7,312	5,223
Payables for freight cost	5,107	5,317
Payables for software usage fee	35	10,598
Others	21,466	21,283
	$ 149,809	$ 155,918
Refund liabilities (Note 22)	$ 185,465	$ 171,618
Other liabilities		
Contract liabilities (Note 22)	$ 1,039	$ 5,050
Receipts under custody	6,415	5,550
Temporary receipts	14	100
	$ 7,468	$ 10,700

20. RETIREMENT BENEFIT PLANS

a. Defined contribution plan

Apart from Yinghon Technology Co., the Group adopted a pension plan under the Labor Pension Act (LPA), which is a state-managed defined contribution plan. Under the LPA, an entity makes monthly contributions to employees' individual pension accounts at 6% of monthly salaries and wages.

b. Defined benefit plan

The defined benefit plan adopted by the Company in accordance with the Labor Standards Act is operated by the government of the ROC. Pension benefits are calculated on the basis of the length of service and average monthly salaries of the 6 months before retirement. The Company contributes amounts equal to 2% of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee. Pension contributions are deposited in the Bank of Taiwan in the committee's name. Before the end of each year, the Company assesses the balance in the pension fund. If the amount of the balance in the pension fund is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Company is required to fund the difference in one appropriation that should be made before the end of March of the next year. The pension fund is managed by the Bureau of Labor Funds, Ministry of Labor (the "Bureau"); the Company has no right to influence the investment policy and strategy.

The amounts included in the consolidated balance sheets in respect of the Group's defined benefit plans were as follows:

	December 31	
	2022	**2021**
Present value of defined benefit obligation	$ 15,616	$ 15,269
Fair value of plan assets	(17,181)	(15,307)
Net defined benefit assets	$ (1,565)	$ (38)

Movements in net defined benefit assets were as follows:

	Present Value of the Defined Benefit Obligation	**Fair Value of the Plan Assets**	**Net Defined Benefit (Assets) Liabilities**
Balance at January 1, 2021	$ 13,679	$ (14,453)	$ (774)
Net interest expense (income)	68	(74)	(6)
Recognized in profit or loss	68	(74)	(6)
Remeasurement			
Return on plan assets	-	(182)	(182)
Actuarial loss - changes in demographic assumptions	430	-	430
Actuarial gain - changes in financial assumptions	(177)	-	(177)
Actuarial loss - experience adjustments	1,269	-	1,269
Recognized in other comprehensive income	1,522	(182)	1,340
Contributions from the employer	-	(598)	(598)
Balance at December 31, 2021	15,269	(15,307)	(38)

(Continued)

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit (Assets) Liabilities
Net interest expense (income)	$ 95	$ (98)	$ (3)
Recognized in profit or loss	95	(98)	(3)
Remeasurement			
Return on plan assets	-	(1,176)	(1,176)
Actuarial loss - changes in demographic assumptions	15	-	15
Actuarial gain - changes in financial assumptions	(367)	-	(367)
Actuarial loss - experience adjustments	604	-	604
Recognized in other comprehensive income	252	(1,176)	(924)
Contributions from the employer	-	(600)	(600)
Balance at December 31, 2022	$ 15,616	$ (17,181)	$ (1,565)

(Concluded)

An analysis by function of the amounts recognized in profit or loss in respect of the defined benefit plans is as follows:

	For the Year Ended December 31	
	2022	2021
General and administrative expenses	$ (1)	$ (1)
Research and development expenses	(2)	(5)
	$ (3)	$ (6)

Through the defined benefit plans under the Labor Standards Act, the Company is exposed to the following risks:

1) Investment risk: The plan assets are invested in domestic and foreign equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the Bureau or under the mandated management. However, in accordance with relevant regulations, the return generated by plan assets should not be below the interest rate for a 2-year time deposit with local banks.

2) Interest risk: A decrease in the government bond interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the plan's debt investments.

3) Salary risk: The present value of the defined benefit obligation is calculated using the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the present value of the defined benefit obligation.

The actuarial valuations of the present value of the defined benefit obligation were carried out by qualified actuaries. The significant assumptions used for the purposes of the actuarial valuations were as follows:

	December 31	
	2022	2021
Discount rate(s)	1.375%	0.625%
Expected rate(s) of salary increase	3.50%	3.00%

If possible reasonable change in each of the significant actuarial assumptions will occur and all other assumptions will remain constant, the present value of the defined benefit obligation would (decrease) increase as follows:

	December 31	
	2022	2021
Discount rate(s)		
0.25% increase	$ (331)	$ (354)
0.25% decrease	$ 342	$ 366
Expected rate(s) of salary increase		
0.25% increase	$ 329	$ 352
0.25% decrease	$ (320)	$ (342)

The above sensitivity analysis presented above may not be representative of the actual change in the present value of the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

	December 31	
	2022	2021
Expected contributions to the plan for the next year	$ 600	$ 600
Average duration of the defined benefit obligation	8.6 years	9.4 years

21. EQUITY

a. Ordinary shares

	December 31	
	2022	2021
Number of shares authorized (in thousands of shares)	200,000	200,000
Shares authorized	$ 2,000,000	$ 2,000,000
Number of shares issued and fully paid (in thousands of shares)	90,169	88,469
Shares issued and fully paid	$ 901,689	$ 884,689

A holder of ordinary shares issued with par value of $10 is entitled to vote and to receive dividends.

The authorized shares include 10,000 thousand shares reserved for the exercise of employee share options.

On July 27, 2021, the shareholders' meetings resolved to increase authorized shares to $2,000,000 thousand, and appropriate stock dividends from the unappropriated earnings of $252,768 thousand.

On April 28, 2022, the Company's board of directors resolved to issue 1,700 thousand ordinary shares with a par value of $10, for a consideration of $105 per share which were fully paid. On July 6, 2022, the above transaction was approved by the FSC, and the subscription base date was September 12, 2022. The Company has completed the alteration registration.

b. Capital surplus

	December 31	
	2022	2021
Maybe used to offset a deficit, distributed as cash dividends, or transferred to share capital (1)		
Issuance of ordinary shares	$ 497,045	$ 330,128
May be used to offset a deficit		
Issuance of ordinary shares (exercised or expired employee share options)	85,484	85,052
May not be used for any purpose		
Employee share options	15,269	1,174
Share options	28,500	-
	$ 626,298	$ 416,354

1) Such capital surplus may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be distributed as cash dividends or transferred to share capital (limited to a certain percentage of the Company's capital surplus and to once a year).

c. Retained earnings and dividends policy

Under the dividends policy as set forth in the Company's Articles of Incorporation ("Articles"), where the Company made a profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside a legal reserve of 10% of the remaining profit, setting aside or reversing a special reserve in accordance with the laws and regulations, and then any remaining profit together with any undistributed retained earnings shall be used by the Company's board of directors as the basis for proposing a distribution plan, which should be resolved in the shareholders' meeting for the distribution of dividends and bonuses to shareholders. Refer to Note 23(g) for the policies on the distribution of compensation of employees and remuneration of directors.

The Company's Articles also stipulate a balanced and stable dividends policy whereby share and cash dividends are distributed based on the Company's profitability, financial structure and future development plans. Dividends may be distributed in form of cash or shares taking into consideration future profitability and funding needs, out of which the total cash dividends paid in any given year shall be at least 10% of the total dividends distributed.

Appropriation of earnings to the legal reserve shall be made until the legal reserve equals the Company's paid-in capital. The legal reserve may be used to offset deficits. If the Company has no deficits and the legal reserve has exceeded 25% of the Company's paid-in capital, the excess may be transferred to capital or distributed in cash.

The appropriations of earnings for 2021 and 2020, which were approved in the shareholders' meetings on May 26, 2022 and July 27, 2021, respectively, were as follows:

	Appropriation of Earnings For the Year Ended December 31	
	2021	2020
Legal reserve	$ 46,444	$ 86,572
Special reserve	$ 272	$ 699
Cash dividends	$ 309,642	$ 252,768
Share dividends	$ -	$ 252,768
Cash dividends per share (NT$)	$ 3.50	$ 4.00
Share dividends per share (NT$)	$ -	$ 4.00

The appropriation of earnings for 2022, which were proposed by the Company's board of directors on February 23, 2023, were as follows:

	For the Year Ended December 31, 2022
Legal reserve	$ 5,580
Reversal of special reserve	$ (1,373)

The appropriation of earnings for 2022 will be resolved by the shareholders in their meeting to be held on May 25, 2023.

d. Special reserve

	For the Year Ended December 31	
	2022	2021
Balance at January 1	$ 1,101	$ 402
Appropriations in respect of debits to other equity items	272	699
Balance at December 31	$ 1,373	$ 1,101

e. Other equity items

1) Exchange differences on translation of the financial statements of foreign operations

	For the Year Ended December 31	
	2022	2021
Balance at January 1	$ (1,359)	$ (1,086)
Recognized for the year		
Exchange differences on translation of the financial statements of foreign operations	1,686	(273)
Balance at December 31	$ 327	$ (1,359)

2) Unrealized gain (loss) on financial assets at FVTOCI

	For the Year Ended December 31	
	2022	2021
Balance at January 1 and December 31	$ (14)	$ (14)

22. REVENUE

a. Contract revenue from customers

	For the Year Ended December 31	
	2022	2021
Revenue from the sale of goods	$ 3,429,371	$ 5,316,162
Royalty revenue	-	105
	$ 3,429,371	$ 5,316,267

b. Contract information

As wireless communication products are innovative and the prices are highly volatile, the discount is estimated at the most likely amount based on the range of discounts given in the past. Based on conventional business practices, the Group accepts the return of goods with full refunds, and estimates the discount rate based on most likely amount from past experience, and recognizes the refund liabilities accordingly.

c. Contract balances

	December 31, 2022	December 31, 2021	January 1, 2021
Accounts receivable (Note 9)	$ 1,046,374	$ 752,673	$ 1,253,538
Contract liabilities (Note 19)			
Sale of goods	$ 1,039	$ 5,050	$ 9,075

Revenue in the current year that was recognized from the contract liabilities at the beginning of the year is as follows:

	For the Year Ended December 31	
	2022	2021
From contract liabilities at the beginning of the year		
Sale of goods	$ 4,786	$ 9,013

d. Disaggregation of revenue

	For the Year Ended December 31	
	2022	2021
Type of goods or services		
WIFI products	$3,276,955	$5,038,763
Others	152,416	277,504
	$3,429,371	$5,316,267

23. NET PROFIT

a. Interest income

	For the Year Ended December 31	
	2022	2021
Bank deposits	$10,585	$ 1,898
Deposit interest	42	42
	$10,627	$ 1,940

b. Other income

	For the Year Ended December 31	
	2022	2021
Rental income	$ 842	$ 798
Government Grant	126	80
Others	45	1,439
	$ 1,013	$ 2,317

c. Other gains and losses

	For the Year Ended December 31	
	2022	2021
Net foreign exchange gains (losses)	$ 72,428	$ (9,757)
Profit from lease modification	627	4
Loss on disposal of property, plant and equipment	(218)	-
Fair value changes of financial liabilities designated as at FVTPL	(780)	-
Others	(316)	(1)
	$ 71,741	$ (9,754)

d. Finance costs

	For the Year Ended December 31	
	2022	2021
Interest on bank loans	$ 2,226	$ 434
Interest on convertible bonds	2,152	-
Interest on lease liabilities	509	771
	$ 4,887	$ 1,205

e. Depreciation and amortization

	For the Year Ended December 31	
	2022	2021
An analysis of depreciation by function		
Operating costs	$ 499	$ 4,119
Selling and marketing expenses	10,546	7,942
General and administrative expenses	21,152	15,546
Research and development expenses	72,134	60,807
	$ 104,331	$ 88,414
An analysis of amortization by function		
Selling and marketing expenses	$ 258	$ -
General and administrative expenses	3,230	2,368
Research and development expenses	26,970	24,691
	$ 30,458	$ 27,059

f. Employee benefits expense

	For the Year Ended December 31	
	2022	2021
Post-employment benefits (Note 20)		
Defined contribution plans	$ 18,728	$ 17,773
Defined benefit plans	(3)	(6)
	18,725	17,767
Share-based payments		
Equity-settled	22,569	1,174
Other employee benefits	521,553	500,845
Total employee benefits expense	$ 562,847	$ 519,786

	For the Year Ended December 31	
	2022	2021
An analysis of employee benefits expense by function		
Selling and marketing expenses	$ 96,129	$ 76,227
General and administrative expenses	149,477	130,577
Research and development expenses	317,241	312,982
	$ 562,847	$ 519,786

g. Compensation of employees and remuneration of directors

According to the Company’s Articles, the Company accrues compensation of employees and remuneration of directors at rates no less than 8% and no higher than 1%, respectively, of net profit before income tax, compensation of employees and remuneration of directors.

The compensation of employees and remuneration of directors for the years ended December 31, 2022 and 2021 are as follows:

Accrual rate

	For the Year Ended December 31	
	2022	**2021**
Compensation of employees	8%	8%
Remuneration of directors	1%	1%

Amount

	For the Year Ended December 31			
	2022		**2021**	
	Cash	**Shares**	**Cash**	**Shares**
Compensation of employees	$ 5,388	$ -	$ 46,321	$ -
Remuneration of directors	673	-	5,790	-

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.

There was no difference between the actual amounts of compensation of employees and remuneration of directors paid and the amounts recognized in the consolidated financial statements for the years ended December 31, 2021 and 2020.

The Company held board of directors' meetings on February 23, 2023, and the amount of the compensation of employees approved in the board of directors' meeting was differ from the amounts recognized in the consolidated financial statements for the year ended December 31, 2022. The differences were adjusted to profit and loss for the year ended December 31, 2023.

	For the Year Ended December 31, 2022
Amounts approved in the board of directors' meeting	$ 8,082
Amounts recognized in the annual consolidated financial statements	$ 5,388

Information on the compensation of employees and remuneration of directors resolved by the Company's board of directors in 2023 and 2022 is available at the Market Observation Post System website of the Taiwan Stock Exchange.

h. Gain or loss on foreign currency exchange

	For the Year Ended December 31	
	2022	**2021**
Foreign exchange gains	$ 153,211	$ 40,030
Foreign exchange losses	(80,783)	(49,787)
Net gain (loss) on foreign currency exchange	$ (72,428)	$ (9,757)

24. INCOME TAXES

a. Income tax recognized in profit or loss

Major components of income tax expense are as follows:

	For the Year Ended December 31	
	2022	2021
Current tax		
In respect of the current year	$ 9,361	$ 111,243
Income tax on unappropriated earnings	2,904	-
Adjustments for prior year	(3,766)	(3,306)
Deferred tax		
In respect of the current year	(2,269)	(46,548)
Income tax expense recognized in profit or loss	$ 6,230	$ 61,389

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

	For the Year Ended December 31	
	2022	2021
Profit before tax	$ 61,289	$ 526,906
Income tax expense calculated at the statutory rate	$ 12,260	$ 105,381
Nondeductible expense in determining taxable income	(98)	(121)
Income tax on unappropriated earnings	2,904	-
Unrecognized deductible temporary differences	185	(139)
Investment tax credits	(5,255)	(40,426)
Adjustments for prior year' tax	(3,766)	(3,306)
Income tax expense recognized in profit or loss	$ 6,230	$ 61,389

b. Income tax recognized in other comprehensive income

	For the Year Ended December 31	
	2022	2021
Deferred tax		
In respect of the current year		
Remeasurement of defined benefit plans	$ (185)	$ 268

c. Current tax assets and liabilities

	December 31	
	2022	2021
Current tax liabilities		
Income tax payable	$ 11,476	$ 10,803

d. Deferred tax assets and liabilities

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

For the year ended December 31, 2022

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Closing Balance
Deferred tax assets				
Temporary differences				
Refund liabilities	$ 34,322	$ 2,771	$ -	$ 37,093
Defined benefit plans	1,942	-	(185)	1,757
Payable for annual leave	1,472	353	-	1,825
Loss on investments accounted for using the equity method	1,383	(593)	-	790
Allowance for impairment loss	47	277	-	324
Unrealized foreign exchange loss	1,055	(1,055)	-	-
Unrealized write-downs of inventories	42,770	10,029	-	52,799
Others	278	(122)	-	156
	$ 83,269	$ 11,660	$ (185)	$ 94,744

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Closing Balance
Deferred tax liabilities				
Temporary differences				
Unrealized foreign exchange gain	$ -	$ 9,391	$ -	$ 9,391

For the year ended December 31, 2021

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Closing Balance
Deferred tax assets				
Temporary differences				
Refund liabilities	$ 17,018	$ 17,304	$ -	$ 34,322
Defined benefit plans	1,674	-	268	1,942
Payable for annual leave	1,405	67	-	1,472
Loss on investments accounted for using the equity method	472	911	-	1,383
Allowance for impairment loss	47	-	-	47
Unrealized foreign exchange loss	17	1,038	-	1,055
Unrealized write-downs of inventories	15,542	27,228	-	42,770
Others	278	-	-	278
	$ 36,453	$ 46,548	$ 268	$ 83,269

e. Income tax assessments

The Company’s tax returns through 2020 have been assessed by the tax authorities.

25. EARNINGS PER SHARE

Unit: NT$ Per Share

	For the Year Ended December 31	
	2022	**2021**
Basic earnings per share	$ 0.62	$ 5.26
Diluted earnings per share	$ 0.62	$ 5.25

Net Profit for the Year

	For the Year Ended December 31	
	2022	**2021**
Earnings used in the computation of basic and diluted earnings per share	$ 55,059	$ 465,517

The weighted average number of ordinary shares outstanding (in thousands of shares) was as follows:

	For the Year Ended December 31	
	2022	**2021**
Weighted average number of ordinary shares used in the computation of basic earnings per share	88,981	88,469
Effect of potentially dilutive ordinary shares		
Compensation of employees	79	193
Weighted average number of ordinary shares used in the computation of diluted earnings per share	89,060	88,662

Since the Group may settle compensation of employees in cash or shares, the Group assumes that the entire amount of the compensation will be settled in shares, and the resulting potential shares are included in the weighted average number of shares outstanding used in the computation of diluted earnings per share, as the effect is dilutive. Such dilutive effect of the potential shares is included in the computation of diluted earnings per share until the number of shares to be distributed to employees is resolved in the following year.

Since the exercise price of the options issued by the Company exceeded the average market price of the shares during the year ended December 31, 2022, they are anti-dilutive and excluded from the computation of diluted earnings per share.

If the outstanding convertible bonds issued by the Company are converted to ordinary shares, the exercise price of the options issued by the Company exceeded the average market price of the shares between July 29, 2022 and December 31, 2022, they are anti-dilutive and excluded from the computation of diluted earnings per share.

28. SHARE-BASED PAYMENT ARRANGEMENTS

a. Employee share option plan

The Company issued 300 units of employee share options on November 29, 2021. On the grant date, each option entities the holder with the right to subscribe for one thousand ordinary share of the Company at the exercise price of NT$279 per share. The options are granted to the employees of the Company and its subsidiaries that meet certain criteria. The expected lifetime of the options is 4 years. The options are exercisable by the qualified employees at 50% after the second year from the grant date, and another two tranches of 25% exercisable after third and fourth years from the grant date. The vesting period will end on November 29, 2025.

Information on outstanding employee share options is as follows:

	For the Year Ended December 31			
	2022		2021	
	Number of Options (In Thousands of Units)	Weighted-average Exercise Price (NT$)	Number of Options (In Thousands of Units)	Weighted-average Exercise Price (NT$)
Balance at January 1	300	$ 279	-	$ -
Options granted	-	-	300	279
Balance at December 31	300	272.9	300	-
Options exercisable, end of the year	-	-	-	-
Weighted - average fair value of options granted (NT$)	$ 122.02		$ 122.02	

As of the balance sheet date, information about employee share options outstanding was as follows:

	For the Year Ended December 31	
	2022	2021
Range of exercise price (NT$)	$ 272.9	$ 279
Weighted average remaining contractual life (in years)	3.25	4

The options granted by the Company are priced using the Black-Scholes pricing model and the related inputs to the model are as follows:

	November 29, 2021
Grant-date share price	NT$279
Expected volatility	59.55%、57.55% and 56.53%
Risk-free interest rate	0.40%、0.41% and 0.42%
Expected dividend yield rate	-
Expected life	3.5 years、4 years and 4.5 years

Compensation costs recognized were $14,095 thousand and $1,174 thousand for the years ended December 31, 2022 and 2021, respectively.

b. Issued ordinary shares for cash which are reserved for employees

On April 28, 2022, the Company's board of directors resolved to issue 1,700 thousand ordinary shares for cash, and reserved 15% shares for employees under Company Act. The 255 thousand shares were granted on July 19, 2022.

The options granted by the Company are priced using the Black-Scholes pricing model and the related inputs to the model are as follows:

	July 19, 2022
Grant-date share price	NT$136.5
Exercise price	NT$105
Fair value of options	NT$33.23
Expected volatility	61.79%
Risk-free interest rate	0.7%
Expected life	0.13 years

Compensation costs recognized were $8,474 thousand for the year ended December 31, 2022.

27. CAPITAL MANAGEMENT

The Group manages its capital to ensure that entities in the Group will be able to continue as going concerns while maximizing the return to stakeholders through the optimization of the debt and equity balance. The Group's overall strategy remains unchanged.

The capital structure of the Group consists of net debt (borrowings offset by cash and cash equivalents) and equity of the Group (comprising issued capital, reserves, retained earnings and other equity).

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

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

28. FINANCIAL INSTRUMENTS

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

December 31, 2022

	Carrying Amount	**Fair Value**			
		Level 1	**Level 2**	**Level 3**	**Total**
Financial liabilities					
Financial liabilities at amortized cost					
Convertible bonds	$ 286,293	$ -	$ 287,400	$ -	$ 287,400

The fair values of the financial assets and financial liabilities included in the Level 2 category above have been determined in accordance with the binary tree pricing model for convertible bonds.

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

1) Fair value hierarchy

December 31, 2022

	Level 1	Level 2	Level 3	Total
Financial liabilities at FVTPL				
Derivative	$ -	$ 480	$ -	$ 480

There were no transfers between Levels 1 and 2 in the current years.

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

Financial Instrument	Valuation Technique and Inputs
Derivatives - redeemable and puttable option of convertible bonds	Binary tree pricing model for convertible bonds. Track the evolution of key underlying variables of options in discrete time through a binary tree over multiple time steps between evaluation date and maturity date. Each node of the tree represents a possible price at a particular point in time.

c. Categories of financial instruments

	December 31	
	2022	2021
Financial assets		
Financial assets at amortized cost (1)	$2,118,162	$1,526,310
Financial liabilities		
FVTPL		
Held for trading	480	-
Amortized cost (2)	738,784	526,489

1) The balances include financial assets at amortized cost, which comprise cash and cash equivalents, accounts receivable, other receivables, financial assets at amortized cost and refundable deposits.

2) The balances include financial liabilities measured at amortized cost, which comprise short-term borrowings, accounts payable, other payables, bonds payable and guarantee deposits.

d. Financial risk management objectives and policies

The Group's major financial instruments included accounts receivable, accounts payable, short-term 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 which analyze exposures by degree and magnitude of risks. These risks include market risk (including foreign currency risk, interest rate risk and other price risk), credit risk, and liquidity risk.

The Group did not use derivative financial instruments to minimize the effect of these risks, but it uses natural hedging from operations and borrowings denominated in foreign currencies to mitigate the impact of foreign currency risk.

The corporate treasury function reports monthly to the Group's risk management committee, an independent body that monitors risks and policies implemented to mitigate risk exposures.

1) Market risk

The Group's activities exposed it primarily to the financial risks of changes in foreign currency risk (see (a) below) and interest rates (see (b) below).

a) Foreign currency risk

The Group has foreign currency denominated sales and purchases, which expose the Group to foreign currency risk. Approximately 76% of the Group's sales is denominated in currencies other than the functional currency of the entity in the Group making the sale, whilst almost 74% of costs is denominated in currencies other than the functional currency of the entity in the Group.

Sensitivity analysis

The Group was mainly exposed to the USD.

The following table details the Group's sensitivity to a 2% increase and decrease in the New Taiwan dollar (i.e., the functional currency) against the relevant foreign currencies. The sensitivity rale used when reporting foreign currency risk internally to key management personnel and representing management's assessment of the reasonably possible change in foreign exchange rates is 2%. The sensitivity analysis included only outstanding foreign currency denominated monetary items and foreign currency forward contracts designated as cash flow hedges and adjusts their translation at the end of the year for a 2% change in foreign currency rates. A positive (negative) number below indicates an increase in pre-tax profit associated with New Taiwan dollar strengthening (weakening) 2% against the relevant currency.

	USD Impact	
	For the Year Ended December 31	
	2022	**2021**
Profit or (loss)	$ 21,762	$ 9,345

This was mainly attributable to the exposure on outstanding accounts receivable, cash and cash equivalents and accounts payable denominated in USD that were not hedged at the end of the year.

The Group's sensitivity to foreign currency increased during the current year mainly due to increase in the accounts receivable denominated in USD.

b) Interest rate risk

The Group is exposed to interest rate risk because entities in the Group borrow funds at both fixed and floating interest rates. The risk is managed by the Group by maintaining an appropriate mix of fixed and floating rate borrowings. Hedging activities are evaluated regularly to align with interest rate views and defined risk appetites ensuring the most cost-effective hedging strategies are applied.

The carrying amounts of the Group's financial assets and financial liabilities with exposure to interest rates at the end of the year were as follows:

	December 31	
	2022	**2021**
Fair value interest rate risk		
Financial assets	$ 366,450	$ 110,000
Financial liabilities	314,868	260,178
Cash flow interest rate risk		
Financial assets	661,142	640,752

Sensitivity analysis

The sensitivity analysis below was determined based on the Group's exposure to interest rates for both derivative and non-derivative instruments at the end of the year. For floating rate liabilities, the analysis was prepared assuming the amount of each liability outstanding at the end of the year was outstanding for the whole year. A 0.25 basis point increase or decrease is used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

If interest rates had been 0.25 basis point higher/lower and all other variables were held constant, the Group's pre-tax profit for the years ended December 31, 2022 and 2021 would have increased/decreased by $1,653 thousand and $1,602 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. At the end of the year, 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 and due to the financial guarantees provided by the Group, could be equal to the carrying amount of the respective recognized financial assets as stated in the balance sheets.

The Group adopted a policy of dealing only with reputable parties and, where necessary, obtains appropriate guarantees to mitigate the risk of financial losses resulting from the default of payment. The Group assesses the creditability of the key customers based on financial information available and mutual transaction records. The Group continuously monitors the credit risk and credit rating of the counterparties, distributes the total transaction amount to customers with sound credit ratings, and controls the credit risk by ensuring that each counterparty's credit limit is reviewed and approved by the risk management committee.

The Group assesses the financial position of customers with outstanding accounts receivable balances regularly and requests for collateral if necessary.

The Group's concentration of credit risk is mainly related to the top five largest customers, which represents 89% and 87% of total accounts receivable as of December 31, 2022 and 2021, respectively.

3) Liquidity risk

The Group manages liquidity risk by monitoring and maintaining a level of cash and cash equivalents deemed adequate to finance the Group's operations and mitigate the effects of fluctuations in cash flows. In addition, management monitors the utilization of bank borrowings and ensures compliance with loan covenants.

The Group relies on bank borrowings as a significant source of liquidity. Refer to (b) below for the amount of unsecured short-term bank loan facilities of the Group as of December 31, 2022 and 2021:

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

The following table details the Group's remaining contractual maturities for its non-derivative financial liabilities with agreed repayment periods. The table has been drawn up based on the undiscounted cash flows of financial liabilities from the earliest date on which the Group can be required to pay. The table includes both interest and principal cash flows. Specifically, financial liabilities with a repayment on demand clause are included in the earliest time band regardless of the probability of the creditors choosing to exercise their rights. The maturity dates for other non-derivative financial liabilities are based on the agreed repayment dates.

December 31, 2022

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years
Non-derivative financial liabilities				
Non-interest bearing	$ 253,951	$ 175,855	$ 21,083	$ 301,602
Lease liabilities	-	7,631	15,459	5,744
	$ 253,951	$ 183,486	$ 36,542	$ 307,346

Additional information about the maturity analysis for lease liabilities

	Less than 1 Year	1-5 Years
Lease liabilities	$ 23,090	$ 5,744

December 31, 2021

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years
Non-derivative financial liabilities				
Non-interest bearing	$ 164,543	$ 125,325	$ 31,679	$ 4,765
Lease liabilities	-	8,288	24,184	28,500
Fixed interest rate liabilities	177	200,000	-	-
	$ 164,720	$ 333,613	$ 55,863	$ 33,265

Additional information about the maturity analysis for lease liabilities

	Less than 1 Year	1-5 Years
Lease liabilities	$ 32,472	$ 28,500

b) Financing facilities

	December 31	
	2022	2021
Unsecured bank loan facilities		
Amount used	$ -	$ 200,000
Amount unused	680,000	259,920
	$ 680,000	$ 459,920

29. TRANSACTIONS WITH RELATED PARTIES

Balances and transactions between the Company and its subsidiaries, which are related parties of the Company, have been eliminated on consolidation and are not disclosed in this note. Besides information disclosed elsewhere in the other notes, details of transactions between the Group and other related parties are disclosed as follows.

a. Remuneration of key management personnel

	For the Year Ended December 31	
	2022	2021
Short-term employee benefits	$ 55,948	$ 60,811
Post-employment benefits	1,188	1,081
	$ 57,136	$ 61,892

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

30. ASSETS PLEDGED AS COLLATERAL OR FOR SECURITY

The following assets were provided as collateral for customs import goods tax and performance guarantee:

	December 31	
	2022	2021
Pledged deposits (classified as financial assets at amortized cost)	$ 9,900	$ 10,000

31. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

In addition to those disclosed in other notes, significant contingencies and unrecognized commitments of the Group at December 31, 2022 and 2021 were as follows:

a. Significant commitments

Under a sales agreement, the Group shall pay royalties at a certain percentage of net sales of certain products. Royalty expenses amounted to $1,349 thousand and $2,483 thousand for the years ended December 31, 2022 and 2021, respectively.

32. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

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

December 31, 2022

	Foreign Currency	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 49,557	30.71	$ 1,521,895
Financial liabilities			
Monetary items			
USD	14,126	30.71	433,809

December 31, 2021

	Foreign Currency	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 27,945	27.68	$ 773,518
Financial liabilities			
Monetary items			
USD	11,064	27.68	306,252

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

	For the Year Ended December 31, 2022		For the Year Ended December 31,2021	
Foreign Currency	Exchange Rate	Net Foreign Exchange Gains	Exchange Rate	Net Foreign Exchange Losses
USD	30.71	$ 46,827	27.68	$ 5,274

33. SEPARATELY DISCLOSED ITEMS

a. Information about significant transactions:

1) Financing provided to others: None

2) Endorsements/guarantees provided: None

3) Marketable securities held (excluding investments in subsidiaries, associates, and joint ventures): None

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

7) Total purchases from or sales to related parties amounting to at least NT$100 million or 20% of the paid-in capital: None

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

9) Trading in derivative instruments: None

10) Intercompany relationships and significant intercompany transactions: Table 1

b. Information on investees: Table 2

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 year, repatriations of investment income, and limit on the amount of investment in the mainland China area: Table 3

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 year

b) The amount and percentage of sales and the balance and percentage of the related receivables at the end of the year

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 year and the purposes

e) The highest balance, the ending balance, the interest rate range, and total current period interest with respect to the financing of funds

f) Other transactions that have a material effect on the profit or loss for the year or on the financial position, such as the rendering or receipt 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

34. SEGMENT INFORMATION

The Group is considered a single operating segment. Information reported to the chief operating decision maker for the purpose of resource allocation and assessment of segment performance focuses on the types of goods or services delivered or provided. The Group is currently engaged in the design and sale of the wireless communication products, and its operating segment's profit or loss, assets and liabilities were measured on the same basis as the consolidated financial statements, please refer to accompanying consolidated financial statements. However, the Group's other overall information is disclosed as follows:

a. Main products analysis of the Group, please refer to Note 22.

b. Geographical information:

The Group's revenue from external customers by location of operations and information about its non-current assets are detailed below:

	External Revenue For the Year Ended December 31		Non-Current Assets December 31	
	2022	2021	2022	2021
Taiwan	$ 1,692,598	$ 2,314,013	$ 228,626	$ 275,186
China	1,336,767	2,564,560	10,372	10,789
Korea	233,541	292,288	-	-
Others	166,465	145,406	-	-
	$ 3,429,371	$ 5,316,267	$ 238,998	$ 285,975

Non-current assets exclude deferred tax assets, net defined benefit assets, refundable deposits and financial assets at amortized cost.

c. Information about major customers (represents more than 10% of revenue)

	For the Year Ended December 31			
	2022		2021	
	Amount	%	Amount	%
Customer A (Note 1)	$ 1,943,246	57	$ 2,270,845	43
Customer B (Note 1)	456,367	13	1,004,302	19
Customer C (Note 1)	NA（Note 2）	-	739,079	14

Note 1: Revenue from WIFI products.

Note 2: Revenue accounting for less than 10% of the Group's revenue.

RICHWAVE TECHNOLOGY CORP. AND SUBSIDIARIES

Intercompany relationships and significant intercompany transactions
FOR THE YEAR ENDED DECEMBER 31, 2022
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

No. (Note 1)	Investee Company	Counterparty	Relationship (Note 2)	Transaction Details			
				Financial Statement Accounts	Amount	Payment Terms	% of Total Sales or Assets (Note 3)
0	Richwave Technology Corp.	Yinghon Technology Co.	1	Other accounts payable	$ 12,563	—	-
			1	Operating expenses	66,886	—	2%
			1	Net revenue	2,291	—	-

Note 1: Companies are numbers as follows:

1. “0” for the Company.
2. Subsidiaries are numbered from Arabic”1” onward.

Note 2：Related party transactions are divided into three categories as below:

1. The Company to the subsidiary.
2. The subsidiary to the Company.
3. Between subsidiaries.

Note 3：The amount was eliminated upon the consolidation.

TABLE 2

RICHWAVE TECHNOLOGY CORP. AND SUBSIDIARIES

INFORMATION ON INVESTEES
FOR THE YEAR ENDED DECEMBER 31, 2022
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		Balance as of December 31, 2022			Net Loss of the Investee	Share of Loss	Note
				December 31, 2022	December 31, 2021	Number of Shares	%	Carrying Amount			
Richwave Technology Corp.	Minerva Technology Co.	Belize	Investment	$ 16,940 (USD 550 thousand)	$ 16,940 (USD 550 thousand)	-	100	$ 13,753	$ (402)	$ (402)	The Group's subsidiary
Minerva Technology Co.	AEGIS LINK CORP.	USA	Selling and marketing	15,428 (USD 500 thousand)	15,428 (USD 500 thousand)	-	100	12,199	(407)	(407)	The Group's subsidiary

RICHWAVE TECHNOLOGY CORP. AND SUBSIDIARIES

INFORMATION ON INVESTMENTS IN MAINLAND CHINA
FOR THE YEAR ENDED DECEMBER 31, 2022
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investee Company	Main Businesses and Products	Paid-in capital	Method of Investment	Accumulated Outward Remittance for Investment from Taiwan as of January 1, 2022	Remittance of Funds		Accumulated Outward Remittance for Investment from Taiwan as of December 31, 2022	Net Income (Loss) of the Investee	% Ownership of Direct or Indirect Investment	Investment Gain (Loss)	Carrying Amount as of December 31, 2022	Accumulated Repatriation of Investment Income as of December 31, 2022	Note
					Outflow	Inflow							
Yinghon Technology Co. （Note）	Development, manufacturing and sales of ICs	$ 57,410 (US$ 2,000 thousand)	Direct Investment	$ 27,840 (US$ 1,000 thousand)	$ 29,570 (US$ 1,000 thousand)	$ -	$ 57,410 (US$ 2,000 thousand)	$ 3,367	100%	$ 3,367	$ 56,976	$ -	The Group’s subsidiary

Accumulated Outward Remittance for Investment in Mainland China as of December 31, 2022	Investment Amount Authorized by Investment Commission, MOEA	Upper Limit on the Amount of Investment Stipulated by Investment Commission, MOEA
$ 57,410 （US$ 2,000 thousand）	$ 57,410 （US$ 2,000 thousand）	$1,423,590

Note: Shenzhen Richwave Technology Co. Ltd. was renamed to Yinghon Technology Co. in September 2021.

V. Parent Company-Only Financial Statement for the Most Recent Fiscal Year, Certified by the CPA

INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders
Richwave Technology Corp.

Opinion

We have audited the accompanying parent company only financial statements of Richwave Technology Corp. (the "Company"), which comprise the parent company only balance sheets as of December 31, 2022 and 2021, and the parent company only statements of comprehensive income, changes in equity and cash flows for the years then ended, and the notes to the parent company only financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying parent company only financial statements present fairly, in all material respects, the accompanying parent company only financial position of the Company as of December 31, 2022 and 2021, and its parent company only financial performance and its parent company only cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers.

Basis for Opinion

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

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the parent company only financial statements for the year ended December 31, 2022. These matters were addressed in the context of our audit of the parent company only financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. The key audit matter of the Company's parent company only financial statements is described as follows:

<u>Revenue Recognition</u>

According to auditing standards in the Republic of China, there is an inherent risk of fraud in revenue recognition. Management may be under pressure to achieve their targets and attempt to inflate sales figures. The main source of revenue for Richwave Technology Corp. is sales of WIFI products. The net revenue for the year ended December 31, 2022 was $3,429,200 thousand. For the accounting policies on revenue recognition, please refer to Notes 4 (l) and 22 of the parent company only financial statements.

Affected by the decline in market demand for the year ended December 31, 2022, Richwave Technology Corp.'s overall net revenue decreased by 35% compared with the year ended December 31, 2021. Therefore, the sales revenue generated by specific sales clients who have not experienced a significant decline in sales or whose sales growth this year are considered potential fraud. Therefore, revenue recognition has been identified as a key audit matter for the year ended December 31, 2022.

In response to the aforementioned key audit matter, we understood the Company's internal controls on the approval of sales orders and its delivery procedures, tested the operating effectiveness of these controls, selected samples and tested the validity of occurrence of the sales transactions, checked for discrepancies between the counterparties of the sales transactions and the parties paying off the receivables, as well as for abnormalities in the payments received after the reporting period.

Responsibilities of Management and Those Charged with Governance for the Parent Company Only Financial Statements

Management is responsible for the preparation and fair presentation of the parent company only financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers, and for such internal control as management determines is necessary to enable the preparation of parent company only financial statements that are free from material misstatement, whether due to fraud or error.

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

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

Auditors' Responsibilities for the Audit of the Parent Company Only Financial Statements

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

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

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

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

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

4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a

material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the parent company only financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.

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

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

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the parent company only financial statements for the year ended December 31, 2022 and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audits resulting in this independent auditors' report are Jian-Ming Zeng and Su-Li Fang.

Deloitte & Touche
Taipei, Taiwan
Republic of China

February 23, 2023

Notice to Readers

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

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

RICHWAVE TECHNOLOGY CORP.

PARENT COMPANY ONLY BALANCE SHEETS
DECEMBER 31, 2022 AND 2021
(In Thousands of New Taiwan Dollars)

	2022		2021	
ASSETS	**Amount**	**%**	**Amount**	**%**
CURRENT ASSETS				
Cash and cash equivalents (Notes 6 and 28)	$ 964,150	28	$ 618,543	19
Accounts receivable, net (Notes 9, 22 and 28)	1,045,751	30	752,673	23
Other receivables (Notes 9 and 28)	26,301	1	7,877	-
Inventories (Note 10)	927,462	27	1,373,460	41
Prepayments (Note 15)	53,340	2	24,351	1
Other current assets (Note 15)	10,314	-	6,527	-
Total current assets	3,027,318	88	2,783,431	84
NON-CURRENT ASSETS				
Financial assets at amortized cost - non-current (Notes 8, 28 and 30)	12,900	-	110,000	3
Investments accounted for using the equity method (Note 11)	70,729	2	36,508	1
Property, plant and equipment (Note 12)	184,910	5	190,251	6
Right-of-use assets (Notes 13)	22,150	1	51,381	2
Other intangible assets (Note 14)	14,876	1	24,934	1
Deferred tax assets (Note 24)	94,744	3	83,269	3
Prepaid equipment	6,690	-	8,620	-
Refundable deposits (Note 28)	7,248	-	12,786	-
Net defined benefit assets - non-current (Note 20)	1,565	-	38	-
Total non-current assets	415,812	12	517,787	16
TOTAL	$ 3,443,130	100	$ 3,301,218	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term borrowings (Notes 16 and 28)	$ -	-	$ 200,000	6
Accounts payable (Notes 18 and 28)	388,724	11	239,208	7
Accrued compensation of employees and remuneration of directors (Note 23)	6,061	-	52,111	2
Other payables (Notes 19 and 28)	138,522	4	153,760	5
Other payables from related parties (Notes 28 and 29)	12,563	-	8,300	-
Current tax liabilities (Note 24)	11,476	-	10,803	-
Lease liabilities - current (Notes 13 and 28)	17,420	1	26,460	1
Refund liabilities - current (Notes 19 and 22)	185,465	6	171,618	5
Other current liabilities (Notes 19 and 22)	7,468	-	10,700	-
Total current liabilities	767,699	22	872,960	26
NON-CURRENT LIABILITIES				
Financial liabilities at fair value through profit or loss - non-current (Notes 7 and 28)	480	-	-	-
Bonds payable (Notes 17 and 28)	286,293	9	-	-
Deferred tax liabilities (Note 24)	9,391	-	-	-
Lease liabilities - non-current (Notes 13 and 28)	5,015	-	25,629	1
Guarantee deposits (Note 28)	1,602	-	4,765	-
Total non-current liabilities	302,781	9	30,394	1
Total liabilities	1,070,480	31	903,354	27
EQUITY (Notes 21 and 26)				
Share capital				
Ordinary shares	901,689	26	884,689	27
Capital surplus	626,298	18	416,354	13
Retained earnings				
Legal reserve	207,114	6	160,670	5
Special reserve	1,373	-	1,101	-
Unappropriated earnings	635,863	19	936,423	28
Total retained earnings	844,350	25	1,098,194	33
Other equity	313	-	(1,373)	-
Total equity	2,372,650	69	2,397,864	73
TOTAL	$ 3,443,130	100	$ 3,301,218	100

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

RICHWAVE TECHNOLOGY CORP.

PARENT COMPANY ONLY STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
(In Thousands of New Taiwan Dollars, Except Earnings Per Share, in New Taiwan Dollars)

	2022		2021	
	Amount	**%**	**Amount**	**%**
NET REVENUE (Notes 22 and 29)	$ 3,429,200	100	$ 5,316,267	100
OPERATING COSTS (Notes 10 and 23)	2,370,665	69	3,770,235	71
GROSS PROFIT	1,058,535	31	1,546,032	29
OPERATING EXPENSES (Notes 20, 23 and 29)				
Selling and marketing expenses	170,053	5	237,106	5
General and administrative expenses	292,579	8	232,964	4
Research and development expenses	602,470	18	539,010	10
Expected credit loss (gain) (Note 9)	12,126	-	(982)	-
Total operating expenses	1,077,228	31	1,008,098	19
PROFIT (LOSS) FROM OPERATIONS	(18,693)	-	537,934	10
NON-OPERATING INCOME AND EXPENSES (Note 23)				
Interest income	10,599	-	1,939	-
Other income	938	-	2,317	-
Other gains and losses	70,235	2	(9,569)	-
Finance costs	(4,758)	-	(1,162)	-
Share of profit or loss of subsidiaries	2,965	-	(4,553)	-
Total non-operating income and expenses	79,979	2	(11,028)	-
PROFIT BEFORE INCOME TAX	61,286	2	526,906	10
INCOME TAX EXPENSE (Note 24)	6,227	-	61,389	1
NET PROFIT FOR THE YEAR	55,059	2	465,517	9

(Continued)

RICHWAVE TECHNOLOGY CORP.

PARENT COMPANY ONLY STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
(In Thousands of New Taiwan Dollars, Except Earnings Per Share, in New Taiwan Dollars)

	2022		2021	
	Amount	**%**	**Amount**	**%**
OTHER COMPREHENSIVE INCOME (LOSS)				
Items that will not be reclassified subsequently to profit or loss:				
Remeasurement of defined benefit plans (Note 20)	$ 924	-	$ (1,340)	-
Income tax related to items that will not be reclassified subsequently to profit or loss (Note 24)	(185)	-	268	-
Items that may be reclassified subsequently to profit or loss:				
Exchange differences on translation of the financial statements of foreign operations (Note 21)	1,686	-	(273)	-
Other comprehensive income (loss) for the year, net of income tax	2,425	-	(1,345)	-
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	$ 57,484	2	$ 464,172	9
EARNINGS PER SHARE (Note 25)				
Basic	$ 0.62		$ 5.26	
Diluted	$ 0.62		$ 5.25	

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

RICHWAVE TECHNOLOGY CORP.

PARENT COMPANY ONLY STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

	Share Capital			Retained Earnings			Other Equity			
	Number of Shares (In Thousands)	Ordinary Shares	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings	Unrealized Valuation Gain (Loss) on Financial Assets at Fair Value Through Other Comprehensive Income	Exchange Differences on Translation of the Financial Statements of Foreign Operations	Total	Total Equity
BALANCE AT JANUARY 1, 2021	63,192	$ 631,921	$ 415,180	$ 74,098	$ 402	$ 1,064,785	$ (14)	$ (1,086)	$ (1,100)	$ 2,185,286
Appropriation of 2020 earnings										
Legal reserve	-	-	-	86,572	-	(86,572)	-	-	-	-
Special reserve	-	-	-	-	699	(699)	-	-	-	-
Cash dividends distributed by the Company	-	-	-	-	-	(252,768)	-	-	-	(252,768)
Share dividends distributed by the Company	25,277	252,768	-	-	-	(252,768)	-	-	-	-
Net profit for the year ended December 31, 2021	-	-	-	-	-	465,517	-	-	-	465,517
Other comprehensive loss for the year ended December 31, 2021 , net of income tax	-	-	-	-	-	(1,072)	-	(273)	(273)	(1,345)
Share-based payment expenses recognized	-	-	1,174	-	-	-	-	-	-	1,174
BALANCE AT DECEMBER 31, 2021	88,469	884,689	416,354	160,670	1,101	936,423	(14)	(1,359)	(1,373)	2,397,864
Appropriation of 2021 earnings										
Legal reserve	-	-	-	46,444	-	(46,444)	-	-	-	-
Special reserve	-	-	-	-	272	(272)	-	-	-	-
Cash dividends distributed by the Company	-	-	-	-	-	(309,642)	-	-	-	(309,642)
Due to recognition of equity component of convertible bonds issued	-	-	28,500	-	-	-	-	-	-	28,500
Net profit for the year ended December 31, 2022	-	-	-	-	-	55,059	-	-	-	55,059
Other comprehensive gain for the year ended December 31, 2022 , net of income tax	-	-	-	-	-	739	-	1,686	1,686	2,425
Share-based payment expenses recognized	-	-	22,569	-	-	-	-	-	-	22,569
Issue of shares	1,700	17,000	158,875	-	-	-	-	-	-	175,875
BALANCE AT DECEMBER 31, 2022	90,169	$ 901,689	$ 626,298	$ 207,114	$ 1,373	$ 635,863	$ (14)	$ 327	$ 313	$ 2,372,650

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

RICHWAVE TECHNOLOGY CORP.

PARENT COMPANY ONLY STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
(In Thousands of New Taiwan Dollars)

	2022	2021
CASH FLOWS FROM OPERATING ACTIVITIES		
Profit before income tax for the year	$ 61,286	$ 526,906
Adjustments for:		
Depreciation expense	96,236	84,337
Amortization expense	30,458	27,059
Expected credit loss (reversed)	12,126	(982)
Net loss on fair value changes of financial liabilities at fair value through profit or loss	780	-
Finance costs	4,758	1,162
Interest income	(10,599)	(1,939)
Share-based payment expenses recognized	22,569	1,174
Loss on disposal of property, plant and equipment	218	-
Profit from lease modification	(627)	(4)
Share of (gain) loss of subsidiaries	(2,965)	4,553
Write-down of inventories	50,144	136,140
Net loss (gain) on foreign currency exchange	(52,225)	5,186
Changes in operating assets and liabilities:		
Accounts receivable	(307,534)	507,680
Other receivables	(16,991)	21,419
Inventories	395,854	(229,180)
Net defined benefit assets	(603)	(604)
Prepayments	(28,989)	(11,437)
Other current assets	(3,787)	(1,347)
Accounts payable	152,819	(735,763)
Other payables	(2,058)	40,243
Accrued compensation of employees and remuneration of directors	(46,050)	(48,482)
Refund liabilities	13,847	86,229
Contract liabilities	(4,011)	(4,025)
Other current liabilities	779	2,509
Cash generated from operations	365,435	410,834
Interest received	9,166	2,061
Interest paid	(2,783)	(985)
Income tax paid	(7,823)	(238,370)
Net cash generated from operating activities	363,995	173,540

(Continued)

RICHWAVE TECHNOLOGY CORP.

PARENT COMPANY ONLY STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
(In Thousands of New Taiwan Dollars)

	2022	2021
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of financial assets at amortized cost	$ (9,900)	$ (107,000)
Proceeds from disposal of financial assets at amortized cost	107,000	-
Acquisition of investments accounted for using equity method	(29,570)	(27,840)
Purchase of property, plant and equipment	(63,777)	(123,777)
Proceeds from disposal of property, plant and equipment	14	-
Increase in refundable deposits	-	(2,692)
Decrease in refundable deposits	5,538	-
Purchase of other intangible assets	(30,963)	(38,669)
Net cash used in investing activities	(21,658)	(299,978)
CASH FLOWS FROM FINANCING ACTIVITIES		
Increase in short-term borrowings	1,060,000	400,000
Decrease in short-term borrowings	(1,260,000)	(200,000)
Proceeds from issuing convertible bonds	312,341	-
Decrease in guarantee deposits	(3,647)	-
Repayment of the principal portion of lease liabilities	(23,242)	(27,972)
Cash dividends paid	(309,642)	(252,768)
Proceeds from issuing shares	175,875	-
Net cash used in financing activities	(48,315)	(80,740)
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	51,585	(5,050)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	345,607	(212,228)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	618,543	830,771
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	$ 964,150	$ 618,543

(Concluded)

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

(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

1. GENERAL INFORMATION

Richwave Technology Corp. (the "Company") was incorporated in the Republic of China (ROC) in January 2004. The Company is mainly engaged in the design and sale of integrated circuits (ICs) for wireless communication products. The Company's shares have been listed on the Taiwan Stock Exchange (TWSE) since November 2015.

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

2. APPROVAL OF FINANCIAL STATEMENTS

The parent company only financial statements were approved by the Company's board of directors on February 23, 2023.

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

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

   The initial application of the IFRSs endorsed and issued into effect by the FSC did not have any material impact on the Company's accounting policies.

b. The IFRSs endorsed by the FSC for application starting from 2023

New, Amended and Revised Standards and Interpretations	Effective Date Announced by IASB
Amendments to IAS 1 "Disclosure of Accounting Policies"	January 1, 2023 (Note 1)
Amendments to IAS 8 "Definition of Accounting Estimates"	January 1, 2023 (Note 2)
Amendments to IAS 12 "Deferred Tax related to Assets and Liabilities arising from a Single Transaction"	January 1, 2023 (Note 3)

Note 1: The amendments will be applied prospectively for annual reporting periods beginning on or after January 1, 2023.

Note 2: The amendments will be applicable to changes in accounting estimates and changes in accounting policies that occur on or after the beginning of the annual reporting period beginning on or after January 1, 2023.

Note 3: Except for deferred taxes that were recognized on January 1, 2022 for temporary differences associated with leases and decommissioning obligations, the amendments were applied prospectively to transactions that occur on or after January 1, 2022.

As of the date the financial statements were authorized for issue, the Company has assessed that the application of other standards and interpretations will not have a material impact on the Company's financial position and financial performance.

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

New, Amended and Revised Standards and Interpretations	Effective Date Announced by IASB (Note 1)
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"	To be determined by IASB
Amendments to IFRS 16 "Leases Liability in a Sale and Leaseback"	January 1, 2024 (Note 2)
IFRS 17 "Insurance Contracts"	January 1, 2023
Amendments to IFRS 17	January 1, 2023
Amendments to IFRS 17 "Initial Application of IFRS 9 and IFRS 17 - Comparative Information"	January 1, 2023
Amendments to IAS 1 "Classification of Liabilities as Current or Non-current"	January 1, 2024
Amendments to IAS 1 "Non-current Liabilities with Covenants"	January 1, 2024

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

Note 2: A seller-lessee shall apply the Amendments to IFRS 16 retrospectively to sale and leaseback transactions entered into after the date of initial application of IFRS 16.

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

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

For the convenience of readers, the accompanying parent company only financial statements have been translated into English from original Chinese version prepared and used in the ROC. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language parent company only financial statements shall prevail.

a. Statement of compliance

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

b. Basis of preparation

The parent company only financial statements have been prepared on the historical cost basis except for financial instruments that are measured at fair value and net defined benefit assets which are measured at the present value of the defined benefit obligation less the fair value of plan assets.

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

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

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

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

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

c. Classification of current and non-current assets and liabilities

Current assets include:

1) Assets held primarily for the purpose of trading;

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

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

Current liabilities include:

1) Liabilities held primarily for the purpose of trading;

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

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

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

d. Foreign currencies

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

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

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

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

For the purpose of presenting the parent company only financial statements, the functional currencies of the Company's foreign operations (including subsidiaries in other countries or those that use currencies different from the currency of the Company) are translated into the presentation currency, the New Taiwan dollar, as follows: Assets and liabilities are translated at the exchange rates prevailing at the end of the reporting period; income and expense items are translated at the average exchange rates for the period. The resulting currency translation differences are recognized in other comprehensive income.

e. Inventories

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

f. Investments in subsidiaries

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

A subsidiary is an entity that is controlled by the Company.

Under the equity method, an investment in a subsidiary is initially recognized at cost and adjusted thereafter to recognize the Company's share of the profit or loss and other comprehensive income of the subsidiary. The Company also recognizes the changes in the Company's share of equity of subsidiaries attributable to the Company.

Changes in the Company's ownership interest in a subsidiary that do not result in the Company losing control of the subsidiary are accounted for as equity transactions. The Company recognizes directly in equity any difference between the carrying amount of the investment and the fair value of the consideration paid or received.

When the Company's share of loss of a subsidiary exceeds its interest in that subsidiary (which includes any carrying amount of the investment accounted for using the equity method and long-term interests that, in substance, form part of the Company's net investment in the subsidiary), the Company continues recognizing its share of further loss, if any.

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

g. Property, plant and equipment

Property, plant and equipment are initially measured at cost and subsequently measured at cost less accumulated depreciation and accumulated impairment loss.

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

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

h. Intangible assets

1) Intangible assets acquired separately

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

2) Derecognition of intangible assets

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

i. Impairment of property, plant and equipment, right-of-use assets and intangible assets

At the end of each reporting period, the Company reviews the carrying amounts of its property, plant and equipment, right-of-use assets and intangible assets, excluding goodwill, to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs.

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

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

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

j. Financial instruments

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

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

1) Financial assets

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

a) Measurement categories

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

i. Financial assets at amortized cost

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

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

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

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

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

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

ii) Financial assets that are not credit-impaired on purchase or origination but has subsequently become credit impaired, for which interest income is calculated by applying the effective interest rate to the amortized cost of such financial assets in subsequent reporting periods.

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

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

ii) Breach of contract, such as a default;

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

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

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

b) Impairment of financial assets

The Company recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including accounts receivable).

The Company always recognizes lifetime Expected Credit Losses (ECLs) for accounts receivable.

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

The impairment loss of all financial assets is recognized in profit or loss by reduction in their carrying amount through a loss allowance account, except for investments in debt instruments that are measured at FVTOCI, for which the loss allowance is recognized in other comprehensive income and the carrying amount of the financial assets are not reduced.

c) Derecognition of financial assets

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

On derecognition of a financial asset at amortized cost in its entirety, the difference between the asset’s carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. On derecognition of an investment in an equity instrument at FVTOCI, the cumulative gain or loss that had been recognized in other comprehensive income is transferred directly to retained earnings, without recycling through profit or loss.

2) Equity instruments

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

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

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

3) Financial liabilities

a) Subsequent measurement

Except the following situations, all financial liabilities are measured at amortized cost using the effective interest method:

i. Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when such financial liabilities are either held for trading or are designated as at FVTPL.

Financial liabilities held for trading are stated at fair value, and any remeasurement gains or losses on such financial liabilities are recognized in other gains or losses.

b) Derecognition of financial liabilities

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

4) Convertible bonds

The component parts of convertible bonds issued by the Company are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

On initial recognition, the fair value of the liability component is estimated using the prevailing market interest rate for similar non-convertible instruments. This amount is recorded as a liability on an amortized cost basis using the effective interest method until extinguished upon conversion or upon the instrument's maturity date. Any embedded derivative liability is measured at fair value.

The conversion option classified as equity is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognized and included in equity, net of income tax effects, and is not subsequently remeasured. In addition, the conversion option classified as equity will remain in equity until the conversion option is exercised; in which case, the balance recognized in equity will be transferred to capital surplus - share premiums. When the conversion option remains unexercised at maturity, the balance recognized in equity will be transferred to capital surplus - share premiums.

Transaction costs that relate to the issuance of the convertible notes are allocated to the liability and equity components in proportion to the allocation of the gross proceeds. Transaction costs relating to the equity component are recognized directly in equity. Transaction costs relating to the liability component are included in the carrying amount of the liability component.

k. Provisions

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

l. Revenue recognition

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

The sale of goods is recognized as revenue when the goods are delivered to the customer's specific location or when the goods are shipped because it is the time when the customer has full discretion over the manner of distribution and price to sell the goods, has the primary responsibility for sales to future customers and bears the risks of obsolescence. Accounts receivable are recognized concurrently.

The Company does not recognize revenue on materials delivered to subcontractors because this delivery does not involve a transfer of control.

m. Leases

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

1) The Company as lessor

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

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

2) The Company as lessee

Except for short-term leases and low-value asset leases which are recognized as expenses on a straight-line basis over the lease terms, the Company recognizes right-of-use assets and lease liabilities for all leases at the commencement date of a lease.

Right-of-use assets are initially measured at cost, which comprises the initial measurement of lease liabilities adjusted for lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs needed to restore the underlying assets, and less any lease incentives received. Subsequently, the right-of-use assets are 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 parent company only 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, and payments of penalties for terminating a lease if the lease term reflects such termination, less any lease incentives receivable. The lease payments are discounted using the interest rate implicit in a lease, if that rate can be readily determined. If implicit rate cannot be readily determined, the Company uses the lessee's incremental borrowing rate.

Subsequently, lease liabilities are measured at amortized cost using the effective interest method, with interest expense recognized over the lease terms. When there is a change in a lease term or a change in future lease payments resulting from a change in an index or a rate used to determine those payments, the Company remeasures the lease liabilities with a corresponding adjustment to the right-of-use assets. However, if the carrying amount of the right-of-use assets is reduced to zero, any remaining amount of the remeasurement is recognized in profit or loss. Lease liabilities are presented on a separate line in the parent company only balance sheets.

n. Borrowing costs

Borrowing costs directly attributable to an acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

Other than those stated above, all other borrowing costs are recognized in profit or loss in the period in which they are incurred.

o. Employee benefits

1) Short-term employee benefits

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

2) Retirement benefits

Payments to defined contribution retirement benefit plans are recognized as expenses when employees have rendered services entitling them to the contributions.

Defined benefit costs (including service cost, net interest and remeasurement) under defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost (including current service cost) and net interest on the net defined benefit liabilities (assets) are recognized as employee benefits expense in the period in which they occur. Remeasurement, comprising actuarial gains and losses and the return on plan assets (excluding interest), is recognized in other comprehensive income in the period in which it occurs. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

Net defined benefit liabilities (assets) represent the actual deficit (surplus) in the Company’s defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

3) Other long-term employee benefits

Other long-term employee benefits are accounted for in the same way as the accounting required for defined benefit plans except that remeasurement is recognized in profit or loss.

4) Termination benefits

A liability for a termination benefit is recognized at the earlier of when the Company can no longer withdraw the offer of the termination benefit and when the Company recognizes any related restructuring costs.

p. Share-based payment arrangements (employee share options)

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 Company’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. The expense is recognized in full at the grant date if the grants are vested immediately. The grant date of issued ordinary shares for cash which are reserved for employees is the pricing date.

At the end of each reporting period, the Company revises its estimate of the number of employee share options that are expected to vest. The impact of the revision of the original estimates is recognized in profit or loss such that the cumulative expenses reflect the revised estimate, with a corresponding adjustment to capital surplus - employee share options.

q. Taxation

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

1) Current tax

Income tax payable (refundable) is based on taxable profit (loss) for the year determined according to the applicable tax laws of each tax jurisdiction.

According to the Income Tax Act in the ROC, an additional tax on unappropriated earnings is provided for 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.

2) Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities and the corresponding tax bases used in the computation of taxable profit. If a temporary difference arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit, the resulting deferred tax asset or liability is not recognized.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences and unused loss carryforwards and unused tax credits for purchases of machinery, equipment and technology, research and development expenditures and personal training expenditure to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries, except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are recognized only to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting period and recognized to the to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the period in which the 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 Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

3) Current and deferred taxes for the year

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

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Company's accounting policies, management is required to make judgments, estimations, 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 Company considers the possible impact of the recent development of the COVID-19 and its economic environment implications when making its critical accounting estimates on cash flow projections, growth rate, discount rate, profitability, etc. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised if the revisions affect only that period or in the period of the revisions and future periods if the revisions affect both current and future periods.

Critical Accounting Judgments

a. Lease terms

In determining a lease term, the Company considers all facts and circumstances that create an economic incentive to exercise or not to exercise an option, including any expected changes in facts and circumstances from the commencement date until the exercise date of the option. Main factors considered include contractual terms and conditions for the optional periods, significant leasehold improvements undertaken over the contract term, the importance of the underlying asset to the lessee's operations, etc. The lease term is reassessed if a significant change in circumstances that are within the control of the Company occurs.

Key Sources of Estimation Uncertainty

a. Lessees' incremental borrowing rates

In determining a lessee's incremental borrowing rate used in discounting lease payments, a risk-free rate for the same currency and relevant duration is selected as a reference rate, and the lessee's credit spread adjustments and lease specific adjustments (such as asset type, secured position, etc.) are also taken into account.

6. CASH AND CASH EQUIVALENTS

	December 31	
	2022	2021
Cash on hand	$ 611	$ 588
Demand deposits	609,989	617,955
Cash equivalents		
Time deposits with original maturities of 3 months or less	353,550	-
	$ 964,150	$ 618,543

The market rate intervals of cash and time deposits with original maturities of 3 months or less in the bank at the end of the year were as follows:

	December 31	
	2022	**2021**
Bank deposits	0.01%~1.05%	0.01%~0.30%
Time deposits with original maturities of 3 months or less	0.95%~5.02%	-

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31	
	2022	**2021**
Financial liabilities at FVTPL - non-current		
Financial liabilities held for trading		
Derivative financial liabilities (not under hedge accounting)		
Convertible options (Note 17)	$ 480	$ -

8. FINANCIAL ASSETS AT AMORTIZED COST

	December 31	
	2022	**2021**
Non-current		
Time deposits with original maturities of more than 1 year	$ 3,000	$ 100,000
Pledged Certificate of deposit (b)	9,900	10,000
	$ 12,900	$ 110,000

a. The ranges of interest rates for time deposits were approximately 0.76%~1.025% and 0.09%~0.76% per annum as of December 31, 2022 and 2021, respectively.

b. Refer to Note 30 for information relating to investments in financial assets at amortized cost pledged as security.

9. ACCOUNTS RECEIVABLE AND OTHER RECEIVABLES

	December 31	
	2022	**2021**
Accounts receivable (Note 22)		
At amortized cost		
Gross carrying amount	$1,057,951	$ 752,752
Less: Allowance for impairment loss	(12,200)	(79)
	$1,045,751	$ 752,673

	December 31	
	2022	2021
<u>Other receivables</u>		
Income tax refund receivable	$ 4,965	$ 4,865
Others	21,336	3,012
	$ 26,301	$ 7,877

The average credit period on sales of goods was 30 to 90 days. In order to minimize credit risk, the management of the Company has delegated a team responsible for determining credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In addition, the Company reviews the recoverable amount of each individual trade debt at the end of the year to ensure that adequate allowance is made for possible irrecoverable amounts. In this regard, the management believes the Company's credit risk was significantly reduced.

The Company measures the loss allowance for accounts receivable at an amount equal to lifetime ECLs. The expected credit losses on accounts receivable are estimated using a provision matrix prepared by reference to the past default experience of the customer, the customer's current financial position, economic condition of the industry in which the customer operates and industry outlook. As the Company's historical credit loss experience does not show significantly different loss patterns for different customer segments, the provision for loss allowance based on past due status is not further distinguished according to the Company's different customer base.

The Company writes off an accounts receivable when there is evidence indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery. For accounts receivable that have been written off, the Company continues to engage in enforcement activity to attempt to recover the receivables due. Where recoveries are made, these are recognized in profit or loss.

The following table details the loss allowance of accounts receivable based on the Company's provision matrix.

<u>December 31, 2022</u>

	Not Past Due	1 to 30 Days Past Due	31 to 60 Days Past Due	61 to 90 Days Past Due	91 to 180 Days Past Due	Over 180 Days Past Due	Individual Identification	Total
Expected credit loss rate	0.04%	1.93%	6.53%	6.89%	9.42%	-	100%	
Gross carrying amount	$ 872,545	$ 111,099	$ 25,348	$ 27,769	$ 16,577	$ -	$ 4,613	$ 1,057,951
Loss allowance (Lifetime ECLs)	(318)	(2,140)	(1,654)	(1,914)	(1,561)	-	(4,613)	(12,200)
Amortized cost	$ 872,227	$ 108,959	$ 23,694	$ 25,855	$ 15,016	$ -	$ -	$ 1,045,751

<u>December 31, 2021</u>

	Not Past Due	1 to 30 Days Past Due	31 to 60 Days Past Due	61 to 90 Days Past Due	91 to 180 Days Past Due	Over 180 Days Past Due	Individual Identification	Total
Expected credit loss rate	-	0.02%	3.07%	4.52%	-	100%	-	
Gross carrying amount	$ 737,880	$ 13,285	$ 143	$ 1,439	$ -	$ 5	$ -	$ 752,752
Loss allowance (Lifetime ECLs)	(1)	(3)	(4)	(66)	-	(5)	-	(79)
Amortized cost	$ 737,879	$ 13,282	$ 139	$ 1,373	$ -	$ -	$ -	$ 752,673

The movements of the loss allowance of accounts receivable were as follows:

	For the Year Ended December 31	
	2022	2021
Balance at January 1	$ 79	$ 1,061
Add: Net remeasurement of loss allowance	12,126	-
Less: Amounts written off	(5)	-
Less: Net remeasurement of loss allowance	-	(982)
Balance at December 31	$ 12,200	$ 79

10. INVENTORIES

	December 31	
	2022	2021
Finished goods	$ 259,574	$ 359,010
Work in progress	267,130	323,328
Raw materials	400,758	691,122
	$ 927,462	$ 1,373,460

The nature of the cost of goods sold is as follows:

	For the Year Ended December 31	
	2022	2021
Cost of inventories sold	$ 2,320,521	$ 3,610,893
Loss on disposal of inventories	-	23,202
Inventory write-downs	50,144	136,140
	$ 2,370,665	$ 3,770,235

11. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

	December 31	
	2022	2021
Investments in subsidiary		
Minerva Technology Co.	$ 13,753	$ 12,769
Yinghon Technology Co.	56,976	23,739
	$ 70,729	$ 36,508

	Proportion of Ownership and Voting Rights (%)	
	December 31	
Name of subsidiary	2022	2021
Minerva Technology Co.	100	100
Yinghon Technology Co.	100	100

Remark:

1) In December 2018, the Company established Minerva Technology Co. in Belize with an investment of USD550 thousand. Minerva Technology Co. reinvested and established AEGIS LINK CORP. in USA with USD500 thousand in January 2019. For details of the investment refer to Table 1.

2) In May 2021, the Company established Shenzhen Richwave Technology Co. Ltd. in Shen Zhen with an investment of USD 1,000 thousand. Shenzhen Richwave Technology Co. Ltd. was renamed to Yinghon Technology Co. in September 2021. On February 24, 2022, the board of directors approved a capital increase of USD 1,000 thousand to Yinghon Technology Co. Investment Commission, MOEA approved the capital increase on April 14, 2022, and the Company completed the capital increase in June 2022. Information on investments in mainland China please refer to Table 2.

3) Minerva Technology Co., AEGIS LINK CORP. and Yinghon Technology Co. were recognized based on audited financial statements.

12. PROPERTY, PLANT AND EQUIPMENT

	Testing Equipment	Computer Equipment	Other Equipment	Total
Cost				
Balance at January 1, 2022	$ 163,742	$ 19,713	$ 111,471	$ 294,926
Additions	13,181	5,405	42,711	61,297
Disposals	-	(29)	(1,129)	(1,158)
Transfers from prepayments	6,317	-	336	6,653
Balance at December 31, 2022	$ 183,240	$ 25,089	$ 153,389	$ 361,718
Accumulated depreciation				
Balance at January 1, 2022	$ 51,759	$ 6,935	$ 45,981	$ 104,675
Depreciation expense	28,522	5,670	38,867	73,059
Disposals	-	(29)	(897)	(926)
Balance at December 31, 2022	$ 80,281	$ 12,576	$ 83,951	$ 176,808
Carrying amount at December 31, 2022	$ 102,959	$ 12,513	$ 69,438	$ 184,910
Cost				
Balance at January 1, 2021	$ 110,096	$ 13,070	$ 82,863	$ 206,029
Additions	57,495	7,652	49,105	114,252
Disposals	(5,441)	(1,783)	(21,089)	(28,313)
Transfers from prepayments	1,592	774	592	2,958
Balance at December 31, 2021	$ 163,742	$ 19,713	$ 111,471	$ 294,926

(Continued)

	Testing Equipment	Computer Equipment	Other Equipment	Total
Accumulated depreciation				
Balance at January 1, 2021	$ 36,031	$ 4,502	$ 36,725	$ 77,258
Depreciation expense	21,169	4,216	30,345	55,730
Disposals	(5,441)	(1,783)	(21,089)	(28,313)
Balance at December 31, 2021	$ 51,759	$ 6,935	$ 45,981	$ 104,675
Carrying amount at December 31, 2021	$ 111,983	$ 12,778	$ 65,490	$ 190,251

(Concluded)

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

Testing equipment	6 years
Computer equipment	3-4 years
Other equipment	3-5 years

13. LEASE ARRANGEMENTS

a. Right-of-use assets

	December 31	
	2022	2021
Carrying amount		
Buildings	$ 22,150	$ 51,381

	For the Year Ended December 31	
	2022	2021
Additions to right-of-use assets	$ -	$ 51,415
Depreciation charge for right-of-use assets		
Buildings	$ 23,177	$ 28,607
Income from the subleasing of right-of-use assets (presented in other income)	$ (842)	$ (798)

b. Lease liabilities

	December 31	
	2022	2021
Carrying amount		
Current	$ 17,420	$ 26,460
Non-current	$ 5,015	$ 25,629

Range of discount rate for lease liabilities was as follows:

	December 31	
	2022	2021
Buildings	1.50%	1.50%

c. Material leasing activities and terms

The Company leases buildings for the use of plants, offices and parking spaces with lease terms of 1 to 3 years. The Company does not have bargain purchase options to acquire the leasehold buildings at the end of the lease terms.

d. Other lease information

	For the Year Ended December 31	
	2022	2021
Expenses relating to short-term leases	$ 4,466	$ 4,330
Total cash outflow for leases	$ (28,088)	$ (33,030)

The Company's leases of certain parking spaces, offices and staff dormitories qualify as short-term leases. The Company has elected to apply the recognition exemption and thus, did not recognize right-of-use assets and lease liabilities for these leases.

14. OTHER INTANGIBLE ASSETS

	Computer Software	Specialized Techniques	Trademarks	Total
Cost				
Balance at January 1, 2022	$ 37,593	$ 3,000	$ -	$ 40,593
Additions	19,900	500	-	20,400
Disposals	(14,655)	-	-	(14,655)
Balance at December 31, 2022	$ 42,838	$ 3,500	$ -	$ 46,338
Accumulated amortization				
Balance at January 1, 2022	$ 14,808	$ 851	$ -	$ 15,659
Additions	30,111	347	-	30,458
Disposals	(14,655)	-	-	(14,655)
Balance at December 31, 2022	$ 30,264	$ 1,198	$ -	$ 31,462
Carrying amount at December 31, 2022	$ 12,574	$ 2,302	$ -	$ 14,876
Cost				
Balance at January 1, 2021	$ 40,733	$ 2,488	$ 295	$ 43,516
Additions	31,942	1,500	-	33,442
Disposals	(35,082)	(988)	(295)	(36,365)
Balance at December 31, 2021	$ 37,593	$ 3,000	$ -	$ 40,593

(Continued)

	Computer Software	Specialized Techniques	Trademarks	Total
Accumulated amortization				
Balance at January 1, 2021	$ 23,006	$ 1,664	$ 295	$ 24,965
Additions	26,884	175	-	27,059
Disposals	(35,082)	(988)	(295)	(36,365)
Balance at December 31, 2021	$ 14,808	$ 851	$ -	$ 15,659
Carrying amount at December 31, 2021	$ 22,785	$ 2,149	$ -	$ 24,934

(Concluded)

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

Computer software	1-6 years
Specialized techniques	10 years
Trademarks	10 years

15. OTHER ASSETS

	December 31	
	2022	2021
Current		
Prepayments		
Prepaid expenses	$ 23,033	$ 22,916
Prepayment for purchases	30,307	1,435
	$ 53,340	$ 24,351
Other current assets		
Temporary payments	$ 10,314	$ 6,527

16. SHORT-TERM BORROWINGS

	December 31	
	2022	2021
Unsecured borrowings		
Line of credit borrowings	$ -	$ 200,000

The range of effective interest rate of the line of credit borrowings was 1.04% per annum at December 31 2021.

17. BONDS PAYABLE

	December 31	
	2022	2021
Unsecured domestic convertible bonds	$ 300,000	$ -
Less: Discount on bonds payable	(13,707)	-
	$ 286,293	$ -

At July 29, 2022, the Company issued 3 thousand, 0% NTD-denominated unsecured convertible bonds in Taiwan, with an aggregate principal amount of $300,000 thousand. The issue price was based on 104.98% of the face value.

Each bond entitles the holder to convert it into ordinary shares of the Company at a conversion price of $137.2. Conversion may occur at any time between October 30, 2022 and July 29, 2025.

If the closing price of shares for each of 30 consecutive trading days is at least 130% of the conversion price between the 3 months after the share issuance date and the 40th day before the maturity date, the Company may redeem all the outstanding bonds at their principal amount. If the amount outstanding of bonds is less than 10% of the principal amount, the Company may also redeem the outstanding bonds at their principal amount.

Bondholders have the option to notify the Company of their request for bond redemption within 30 days prior to the second anniversary of the issuance date, and the Company should redeem the bonds at face value.

The convertible bonds contain both liability and equity components. The equity component was presented in equity under the heading of capital surplus - options. The effective interest rate of the liability component was 1.81% per annum on initial recognition.

Proceeds from issuance (less transaction costs of $2,610 thousand)	$ 312,341
Redeemable and puttable option component	300
Equity component (less transaction costs allocated to the equity component of $221 thousand)	(28,500)
Liability component at the date of issue (less transaction costs allocated to the liability component of $2,389 thousand)	284,141
Interest charged at an effective interest rate of 1.81%	2,152
Liability component at December 31, 2022	$ 286,293

18. ACCOUNTS PAYABLE

	December 31	
	2022	2021
Accounts payable		
Generated from operating activities	$ 388,724	$ 239,208

The average credit period was 30 to 60 days. The Company has financial risk management policies in place to ensure that all payables are paid within the pre-agreed credit terms.

19. OTHER LIABILITIES

	December 31	
	2022	2021
Current		
Other payables		
Payables for salaries and bonuses	$ 75,303	$ 64,472
Payables for insurance premium	11,833	11,028
Payables for annual leave	9,127	7,361
Payables for research and design fee	8,343	12,358
Payables for testing fee	8,069	16,709
Payables for purchases of equipment	7,312	5,223
Payables for freight cost	5,107	5,317
Payables for software usage fee	35	10,598
Others	13,393	20,694
	$ 138,522	$ 153,760
Refund liabilities (Note 22)	$ 185,465	$ 171,618
Other liabilities		
Contract liabilities (Note 22)	$ 1,039	$ 5,050
Receipts under custody	6,415	5,550
Temporary receipts	14	100
	$ 7,468	$ 10,700

20. RETIREMENT BENEFIT PLANS

a. Defined contribution plan

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

b. Defined benefit plan

The defined benefit plan adopted by the Company in accordance with the Labor Standards Act is operated by the government of the ROC. Pension benefits are calculated on the basis of the length of service and average monthly salaries of the 6 months before retirement. The Company contributes amounts equal to 2% of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee. Pension contributions are deposited in the Bank of Taiwan in the committee's name. Before the end of each year, the Company assesses the balance in the pension fund. If the amount of the balance in the pension fund is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Company is required to fund the difference in one appropriation that should be made before the end of March of the next year. The pension fund is managed by the Bureau of Labor Funds, Ministry of Labor (the "Bureau"); the Company has no right to influence the investment policy and strategy.

The amounts included in the parent company only balance sheets in respect of the Company's defined benefit plans were as follows:

	December 31	
	2022	**2021**
Present value of defined benefit obligation	$ 15,616	$ 15,269
Fair value of plan assets	(17,181)	(15,307)
Net defined benefit assets	$ (1,565)	$ (38)

Movements in net defined benefit assets were as follows:

	Present Value of the Defined Benefit Obligation	**Fair Value of the Plan Assets**	**Net Defined Benefit (Assets) Liabilities**
Balance at January 1, 2021	$ 13,679	$ (14,453)	$ (774)
Net interest expense (income)	68	(74)	(6)
Recognized in profit or loss	68	(74)	(6)
Remeasurement			
Return on plan assets	-	(182)	(182)
Actuarial loss - changes in demographic assumptions	430	-	430
Actuarial gain - changes in financial assumptions	(177)	-	(177)
Actuarial loss - experience adjustments	1,269	-	1,269
Recognized in other comprehensive income	1,522	(182)	1,340
Contributions from the employer	-	(598)	(598)
Balance at December 31, 2021	15,269	(15,307)	(38)
Net interest expense (income)	95	(98)	(3)
Recognized in profit or loss	95	(98)	(3)
Remeasurement			
Return on plan assets	-	(1,176)	(1,176)
Actuarial loss - changes in demographic assumptions	15	-	15
Actuarial gain - changes in financial assumptions	(367)	-	(367)
Actuarial loss - experience adjustments	604	-	604
Recognized in other comprehensive income	252	(1,176)	(924)
Contributions from the employer	-	(600)	(600)
Balance at December 31, 2022	$ 15,616	$ (17,181)	$ (1,565)

An analysis by function of the amounts recognized in profit or loss in respect of the defined benefit plans is as follows:

	For the Year Ended December 31	
	2022	2021
General and administrative expenses	$ (1)	$ (1)
Research and development expenses	(2)	(5)
	$ (3)	$ (6)

Through the defined benefit plans under the Labor Standards Act, the Company is exposed to the following risks:

1) Investment risk: The plan assets are invested in domestic and foreign equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the Bureau or under the mandated management. However, in accordance with relevant regulations, the return generated by plan assets should not be below the interest rate for a 2-year time deposit with local banks.

2) Interest risk: A decrease in the government bond interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the plan's debt investments.

3) Salary risk: The present value of the defined benefit obligation is calculated using the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the present value of the defined benefit obligation.

The actuarial valuations of the present value of the defined benefit obligation were carried out by qualified actuaries. The significant assumptions used for the purposes of the actuarial valuations were as follows:

	December 31	
	2022	**2021**
Discount rate(s)	1.375%	0.625%
Expected rate(s) of salary increase	3.50%	3.00%

If possible reasonable change in each of the significant actuarial assumptions will occur and all other assumptions will remain constant, the present value of the defined benefit obligation would (decrease) increase as follows:

	December 31	
	2022	**2021**
Discount rate(s)		
0.25% increase	$ (331)	$ (354)
0.25% decrease	$ 342	$ 366
Expected rate(s) of salary increase		
0.25% increase	$ 329	$ 352
0.25% decrease	$ (320)	$ (342)

The above sensitivity analysis presented above may not be representative of the actual change in the present value of the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

	December 31	
	2022	**2021**
Expected contributions to the plan for the next year	$ 600	$ 600
Average duration of the defined benefit obligation	8.6 years	9.4 years

21. EQUITY

a. Ordinary shares

	December 31	
	2022	**2021**
Number of shares authorized (in thousands of shares)	200,000	200,000
Shares authorized	$2,000,000	$2,000,000
Number of shares issued and fully paid (in thousands of shares)	90,169	88,469
Shares issued and fully paid	$ 901,689	$ 884,689

A holder of ordinary shares issued with par value of $10 is entitled to vote and to receive dividends.

The authorized shares include 10,000 thousand of shares reserved for the exercise of employee share options.

On July 27, 2021, the shareholders' meetings resolved to increase authorized shares to $2,000,000 thousand, and appropriate stock dividends from the unappropriated earnings of $252,768 thousand.

On April 28, 2022, the Company's board of directors resolved to issue 1,700 thousand ordinary shares with a par value of $10, for a consideration of $105 per share which were fully paid. On July 6, 2022, the above transaction was approved by the FSC, and the subscription base date was September 12, 2022. The Company has completed the alteration registration.

b. Capital surplus

	December 31	
	2022	**2021**
Maybe used to offset a deficit, distributed as cash dividends, or transferred to share capital (a)		
Issuance of ordinary shares	$ 497,045	$ 330,128
Issuance of ordinary shares (exercised or expired employee share options)	85,484	85,052
May not be used for any purpose		
Employee share options	15,269	1,174
Share options	28,500	-
	$ 626,298	$ 416,354

a) Such capital surplus may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be distributed as cash dividends or transferred to share capital (limited to a certain percentage of the Company's capital surplus and to once a year).

c. Retained earnings and dividends policy

Under the dividend policy as set forth in the Company's Articles of Incorporation ("Articles"), where the Company made a profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside a legal reserve of 10% of the remaining profit, setting aside or reversing a special reserve in accordance with the laws and regulations, and then any remaining profit together with any undistributed retained earnings shall be used by the Company's board of directors as the basis for proposing a distribution plan, which should be resolved in the shareholders' meeting for the distribution of dividends and bonuses to shareholders. Refer to Note 23(g) for the policies on the distribution of compensation of employees and remuneration of directors.

The Company's Articles also stipulate a balanced and stable dividends policy whereby share and cash dividends are distributed based on the Company's profitability, financial structure and future development plans. Dividends may be distributed in the form of cash or shares taking into consideration future profitability and funding needs, out of which the total cash dividends paid in any given year shall be at least 10% of the total dividends distributed.

Appropriation of earnings to the legal reserve shall be made until the legal reserve equals to the Company's paid-in capital. The legal reserve may be used to offset deficits. If the Company has no deficits and the legal reserve has exceeded 25% of the Company's paid-in capital, the excess may be transferred to capital or distributed in cash.

The appropriations of earnings for 2021 and 2020, which were approved in the shareholders' meetings on May 26, 2022 and July 27, 2021, respectively, were as follows:

	Appropriation of Earnings For the Year Ended December 31	
	2021	**2020**
Legal reserve	$ 46,444	$ 86,572
Special reserve	$ 272	$ 699
Cash dividends	$ 309,642	$ 252,768
Share dividends	$ -	$ 252,768
Cash dividends per share (NT$)	$ 3.50	$ 4.00
Share dividends per share (NT$)	$ -	$ 4.00

The appropriation of earnings for 2022, which were proposed by the Company's board of directors on February 23, 2023, were as follows:

	For the Year Ended December 31, 2022
Legal reserve	$ 5,580
Reversal of special reserve	$ (1,373)

The appropriation of earnings for 2022 will be resolved by the shareholders in their meeting to be held on May 25, 2023.

d. Special reserve

	For the Year Ended December 31	
	2022	**2021**
Balance at January 1	$ 1,101	$ 402
Appropriations in respect of debits to other equity items	272	699
Balance at December 31	$ 1,373	$ 1,101

e. Other equity items

1) Exchange differences on translation of the financial statements of foreign operations

	For the Year Ended December 31	
	2022	2021
Balance at January 1	$ (1,359)	$ (1,086)
Recognized for the year		
Exchange differences on translation of the financial statements of foreign operations	1,686	(273)
Balance at December 31	$ 327	$ (1,359)

2) Unrealized gain (loss) on financial assets at FVTOCI

	For the Year Ended December 31	
	2022	2021
Balance at January 1 and December 31	$ (14)	$ (14)

22. REVENUE

a. Contract revenue from customers

	For the Year Ended December 31	
	2022	2021
Revenue from the sale of goods	$ 3,429,200	$ 5,316,162
Royalty revenue	-	105
	$ 3,429,200	$ 5,316,267

b. Contract information

As wireless communication products are innovative and the prices are highly volatile, the discount is estimated at the most likely amount based on the range of discounts given in the past. Based on conventional business practices, the Company accepts the return of goods with full refunds, and estimates the discount rate based on most likely amount from past experience, and recognizes the refund liabilities accordingly.

c. Contract balances

	December 31, 2022	December 31, 2021	January 1, 2021
Accounts receivable (Note 9)	$ 1,045,751	$ 752,673	$ 1,253,538
Contract liabilities (Note 19)			
Sale of goods	$ 1,039	$ 5,050	$ 9,075

Revenue in the current year that was recognized from the contract liabilities at the beginning of the year is as follows:

	For the Year Ended December 31	
	2022	2021
From contract liabilities at the beginning of the year		
Sale of goods	$ 4,786	$ 9,013

d. Disaggregation of revenue

	For the Year Ended December 31	
	2022	2021
Type of goods or services		
WIFI products	$3,276,784	$5,038,763
Others	152,416	277,504
	$3,429,200	$5,316,267

23. NET PROFIT

a. Interest income

	For the Year Ended December 31	
	2022	2021
Bank deposits	$ 10,557	$ 1,897
Deposit interest	42	42
	$ 10,599	$ 1,939

b. Other income

	For the Year Ended December 31	
	2022	2021
Rental income	$ 842	$ 798
Government Grant	51	80
Others	45	1,439
	$ 938	$ 2,317

c. Other gains and losses

	For the Year Ended December 31	
	2022	2021
Net foreign exchange gains (losses)	$ 70,784	$ (9,573)
Fair value changes of financial liabilities designated as at FVTPL	(780)	-
Loss on disposal of property, plant and equipment	(218)	-
Profit from lease modification	627	4
Others	(178)	-
	$ 70,235	$ (9,569)

d. Finance costs

	For the Year Ended December 31	
	2022	2021
Interest on bank loans	$ 2,226	$ 434
Interest on convertible bonds	2,152	-
Interest on lease liabilities	380	728
	$ 4,758	$ 1,162

e. Depreciation and amortization

	For the Year Ended December 31	
	2022	2021
An analysis of depreciation by function		
Operating costs	$ 499	$ 4,119
Selling and marketing expenses	10,032	7,942
General and administrative expenses	13,571	11,469
Research and development expenses	72,134	60,807
	$ 96,236	$ 84,337

	For the Year Ended December 31	
	2022	2021
An analysis of amortization by function		
Selling and marketing expenses	$ 258	$ -
General and administrative expenses	3,230	2,368
Research and development expenses	26,970	24,691
	$ 30,458	$ 27,059

f. Employee benefits expense

	For the Year Ended December 31	
	2022	2021
Post-employment benefits (Note 20)		
Defined contribution plans	$ 18,728	$ 17,773
Defined benefit plans	(3)	(6)
	18,725	17,767
Share-based payments		
Equity-settled	22,569	1,174
Other employee benefits	481,052	494,480
Total employee benefits expense	$ 522,346	$ 513,421
An analysis of employee benefits expense by function		
Selling and marketing expenses	$ 59,519	$ 70,299
General and administrative expenses	145,586	130,140
Research and development expenses	317,241	312,982
	$ 522,346	$ 513,421

g. Compensation of employees and remuneration of directors

According to the Company's Articles, the Company accrues compensation of employees and remuneration of directors at rates no less than 8% and no higher than 1%, respectively, of net profit before income tax, compensation of employees and remuneration of directors.

The compensation of employees and remuneration of directors for the year ended December 31, 2022 and 2021 are as follows:

Accrual rate

	For the Year Ended December 31	
	2022	**2021**
Compensation of employees	8%	8%
Remuneration of directors	1%	1%

Amount

	For the Year Ended December 31			
	2022		**2021**	
	Cash	**Shares**	**Cash**	**Shares**
Compensation of employees	$ 5,388	$ -	$ 46,321	$ -
Remuneration of directors	673	-	5,790	-

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

There was no difference between the actual amounts of compensation of employees and remuneration of directors paid and the amounts recognized in the parent company only financial statements for the years ended December 31, 2021 and 2020.

The Company held board of directors' meetings on February 23, 2023, and the amount of the compensation of employees approved in the board of directors' meeting was differ from the amounts recognized in the parent company only financial statements for the year ended December 31, 2022. The differences were adjusted to profit and loss for the year ended December 31, 2023.

	For the Year Ended December 31, 2022
Amounts approved in the board of directors' meeting	$ 8,082
Amounts recognized in the annual parent company only financial statements	$ 5,388

Information on the compensation of employees and remuneration of directors resolved by the Company's board of directors in 2023 and 2022 is available at the Market Observation Post System website of the Taiwan Stock Exchange.

h. Gain or loss on foreign currency exchange

	For the Year Ended December 31	
	2022	2021
Foreign exchange gains	$149,660	$ 40,181
Foreign exchange losses	(78,876)	(49,754)
Net gain (loss) on foreign currency exchange	$ (70,784)	$ (9,573)

24. INCOME TAXES

a. Income tax recognized in profit or loss

Major components of income tax expense are as follows:

	For the Year Ended December 31	
	2022	2021
Current tax		
In respect of the current year	$ 9,358	$ 111,243
Income tax on unappropriated earnings	2,904	-
Adjustments for prior year	(3,766)	(3,306)
Deferred tax		
In respect of the current year	(2,269)	(46,548)
Income tax expense recognized in profit or loss	$ 6,227	$ 61,389

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

	For the Year Ended December 31	
	2022	2021
Profit before tax	$ 61,286	$ 526,906
Income tax expense calculated at the statutory rate (20%)	$ 12,257	$ 105,381
Nondeductible expense in determining taxable income	(98)	(121)
Income tax on unappropriated earnings	2,904	-
Unrecognized deductible temporary differences	185	(139)
Investment tax credits	(5,255)	(40,426)
Adjustments for prior year’s tax	(3,766)	(3,306)
Income tax expense recognized in profit or loss	$ 6,227	$ 61,389

b. Income tax recognized in other comprehensive income

	For the Year Ended December 31	
	2022	2021
Deferred tax		
In respect of the current year		
Remeasurement of defined benefit plans	$ (185)	$ 268

c. Current tax assets and liabilities

	December 31	
	2022	**2021**
Current tax liabilities		
Income tax payable	$ 11,476	$ 10,803

d. Deferred tax assets and liabilities

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

For the year ended December 31, 2022

	Opening Balance	**Recognized in Profit or Loss**	**Recognized in Other Comprehensive Income**	**Closing Balance**
Deferred tax assets				
Temporary differences				
Refund liabilities	$ 34,322	$ 2,771	$ -	$ 37,093
Defined benefit plans	1,942	-	(185)	1,757
Payable for annual leave	1,472	353	-	1,825
Loss on investments accounted for using the equity method	1,383	(593)	-	790
Allowance for impairment loss	47	277	-	324
Unrealized foreign exchange loss	1,055	(1,055)	-	-
Unrealized write-downs of inventories	42,770	10,029	-	52,799
Others	278	(122)	-	156
	$ 83,269	$ 11,660	$ (185)	$ 94,744
Deferred tax liabilities				
Temporary differences				
Unrealized foreign exchange gain	$ -	$ 9,391	$ -	$ 9,391

For the year ended December 31, 2021

	Opening Balance	Recognized in Profit or Loss	Recognized in Other Comprehensive Income	Closing Balance
Deferred tax assets				
Temporary differences				
Refund liabilities	$ 17,018	$ 17,304	$ -	$ 34,322
Defined benefit plans	1,674	-	268	1,942
Payable for annual leave	1,405	67	-	1,472
Loss on investments accounted for using the equity method	472	911	-	1,383
Allowance for impairment loss	47	-	-	47
Unrealized foreign exchange loss	17	1,038	-	1,055
Unrealized write-downs of inventories	15,542	27,228	-	42,770
Others	278	-	-	278
	$ 36,453	$ 46,548	$ 268	$ 83,269

e. Income tax assessments

The Company’s tax returns through 2020 have been assessed by the tax authorities.

25. EARNINGS PER SHARE

Unit: NT$ Per Share

	For the Year Ended December 31	
	2022	2021
Basic earnings per share	$ 0.62	$ 5.26
Diluted earnings per share	$ 0.62	$ 5.25

The earnings and weighted average number of ordinary shares outstanding used in the computation of earnings per share were as follows:

Net Profit for the Year

	For the Year Ended December 31	
	2022	2021
Earnings used in the computation of basic and diluted earnings per share	$ 55,059	$ 465,517

The weighted average number of ordinary shares outstanding (in thousands of shares) was as follows:

	For the Year Ended December 31	
	2022	2021
Weighted average number of ordinary shares used in the computation of basic earnings per share	88,981	88,469
Effect of potentially dilutive ordinary shares		
Compensation of employees	79	193
Weighted average number of ordinary shares used in the computation of basic earnings per share	89,060	88,662

Since the Company may settle compensation of employees in cash or shares, the Company assumes that the entire amount of the compensation will be settled in shares, and the resulting potential shares are included in the weighted average number of shares outstanding used in the computation of diluted earnings per share, as the effect is dilutive. Such dilutive effect of the potential shares is included in the computation of diluted earnings per share until the number of shares to be distributed to employees is resolved in the following year.

Since the exercise price of the options issued by the Company exceeded the average market price of the shares during the year ended December 31, 2022, they are anti-dilutive and excluded from the computation of diluted earnings per share.

If the outstanding convertible bonds issued by the Company are converted to ordinary shares, the exercise price of the options issued by the Company exceeded the average market price of the shares between July 29, 2022 and December 31, 2022, they are anti-dilutive and excluded from the computation of diluted earnings per share.

26. SHARE-BASED PAYMENT ARRANGEMENTS

a. Employee share option plan

The Company issued 300 units of employee share options on November 29, 2021. On the grant date, each option entities the holder with the right to subscribe for one thousand ordinary share of the Company at exercise price of NT$279 per share. The options are granted to the employees of the Company and its subsidiaries that meet certain criteria. The expected lifetime of the options is 4 years. The options are exercisable by the qualified employees at 50% after the second year from the grant date, and another two tranches of 25% exercisable after third and fourth years from the grant date. The vesting period will be end on November 29, 2025.

Information on outstanding employee share options is as follows:

	For the Year Ended December 31			
	2022		2021	
	Number of Options (In Thousands of Units)	Weighted-average Exercise Price (NT$)	Number of Options (In Thousands of Units)	Weighted-average Exercise Price (NT$)
Balance at January 1	300	$ 279	-	$ -
Options granted	-	-	300	279
Balance at December 31	300	272.9	300	
Options exercisable, end of the year	-		-	
Weighted - average fair value of options granted (NT$)	$ 122.02		$ 122.02	

As of the balance sheet date, information about employee share options outstanding was as follows:

	For the Year Ended December 31	
	2022	2021
Range of exercise price (NT$)	$ 272.9	$ 279
Weighted average remaining contractual life (in years)	3.25	4

The options granted by the Company are priced using the Black-Scholes pricing model and the related inputs to the model are as follows:

	November 29, 2021
Grant-date share price	NT$279
Expected volatility	59.55%、57.55% and 56.53%
Risk-free interest rate	0.40%、0.41% and 0.42%
Expected dividend yield rate	-
Expected life	3.5 years、4 years and 4.5 years

Compensation costs recognized were $14,095 thousand and $1,174 thousand for the years ended December 31, 2022 and 2021, respectively.

b. Issued ordinary shares for cash which are reserved for employees

On April 28, 2022, the Company’s board of directors resolved to issue 1,700 thousand ordinary shares for cash, and reserved 15% shares for employees under Company Act. The 255 thousand shares were granted on July 19, 2022.

The options granted by the Company are priced using the Black-Scholes pricing model and the related inputs to the model are as follows:

	July 19, 2022
Grant-date share price	NT$136.5
Exercise price	NT$105
Fair value of options	NT$33.23
Expected volatility	61.79%
Risk-free interest rate	0.7%
Expected life	0.13 years

Compensation costs recognized were $8,474 thousand for the year ended December 31, 2022.

27. CAPITAL MANAGEMENT

The Company manages its capital to ensure that entities in the Company will be able to continue as going concerns while maximizing the return to stakeholders through the optimization of the debt and equity balance. The Company's overall strategy remains unchanged.

The capital structure of the Company consists of net debt (borrowings offset by cash and cash equivalents) and equity of the Company (comprising issued capital, reserves, retained earnings and other equity).

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

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

28. FINANCIAL INSTRUMENTS

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

December 31, 2022

	Carrying Amount	Fair Value			
		Level 1	Level 2	Level 3	Total
Financial liabilities					
Financial liabilities at amortized cost					
Convertible bonds	$ 286,293	$ -	$ 287,400	$ -	$ 287,400

The fair values of the financial assets and financial liabilities included in the Level 2 category above have been determined in accordance with the binary tree pricing model for convertible bonds.

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

1) Fair value hierarchy

December 31, 2022

	Level 1	Level 2	Level 3	Total
Financial liabilities at FVTPL				
Derivative	$ -	$ 480	$ -	$ 480

There were no transfers between Levels 1 and 2 in the current year.

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

Financial Instrument	Valuation Technique and Inputs
Derivatives - redeemable and puttable option of convertible bonds	Binary tree pricing model for convertible bonds. Track the evolution of key underlying variables of options in discrete time through a binary tree over multiple time steps between evaluation date and maturity date. Each node of the tree represents a possible price at a particular point in time.

c. Categories of financial instruments

	December 31	
	2022	2021
Financial assets		
Financial assets at amortized cost (1)	$ 2,056,350	$ 1,501,879
Financial liabilities		
FVTPL		
Held for trading	480	-
Amortized cost (2)	743,274	534,200

1) The balances include financial assets at amortized cost, which comprise cash and cash equivalents, accounts receivable, other receivables, financial assets at amortized cost and refundable deposits.

2) The balances include financial liabilities measured at amortized cost, which comprise short-term borrowings, accounts payable, other payables (including related parties), bonds payable, and guarantee deposits.

d. Financial risk management objectives and policies

The Company's major financial instruments included accounts receivable, accounts payable, short-term borrowings and lease liabilities. The Company'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 Company through internal risk reports which analyze exposures by degree and magnitude of risks. These risks include market risk (including foreign currency risk, interest rate risk and other price risk), credit risk, and liquidity risk.

The Company did not use derivative financial instruments to minimize the effect of these risks, but it uses natural hedging from operations and borrowings denominated in foreign currencies to mitigate the impact of foreign currency risk.

The corporate treasury function reports monthly to the Company's risk management committee, an independent body that monitors risks and policies implemented to mitigate risk exposures.

1) Market risk

The Company's activities exposed it primarily to the financial risks of changes in foreign currency risk (see (a) below) and interest rates (see (b) below).

a) Foreign currency risk

The Company has foreign currency denominated sales and purchases, which expose the Company to foreign currency risk. Approximately 76% of the Company's sales is denominated in currencies other than the functional currency of the entity in the Company making the sale, whilst almost 74% of costs is denominated in currencies other than the functional currency of the entity in the Company.

Sensitivity analysis

The Company was mainly exposed to the USD.

The following table details the Company's sensitivity to a 2% increase and decrease in the New Taiwan dollar (i.e., the functional currency) against the relevant foreign currencies. The sensitivity rale used when reporting foreign currency risk internally to key management personnel and representing management's assessment of the reasonably possible change in foreign exchange rates is 2%. The sensitivity analysis included only outstanding foreign currency denominated monetary items and foreign currency forward contracts designated as cash flow hedges and adjusts their translation at the end of the year for a 2% change in foreign currency rates. A positive (negative) number below indicates an increase (decrease) in pre-tax profit associated with the New Taiwan dollar strengthening (weakening) 2% against the relevant currency.

	USD Impact	
	For the Year Ended December 31	
	2022	2021
Profit or (loss)	$ 21,100	$ 9,090

This was mainly attributable to the exposure on outstanding accounts receivable, cash and cash equivalents and accounts payable denominated in USD that were not hedged at the end of the year.

The Company's sensitivity to foreign currency increased during the current year mainly due to increase in the accounts receivable denominated in USD.

b) Interest rate risk

The Company is exposed to interest rate risk because the Company borrows funds at both fixed and floating interest rates. The risk is managed by the Company by maintaining an appropriate mix of fixed and floating rate borrowings. Hedging activities are evaluated regularly to align with interest rate views and defined risk appetites ensuring the most cost-effective hedging strategies are applied.

The carrying amounts of the Company’s financial assets and financial liabilities with exposure to interest rates at the end of the year were as follows:

	December 31	
	2022	**2021**
Fair value interest rate risk		
Financial assets	$ 366,450	$ 110,000
Financial liabilities	308,728	252,089
Cash flow interest rate risk		
Financial assets	609,989	617,955

Sensitivity analysis

The sensitivity analysis below was determined based on the Company’s exposure to interest rates for both derivative and non-derivative instruments at the end of the year. For floating rate liabilities, the analysis was prepared assuming the amount of each liability outstanding at the end of the year was outstanding for the whole year. A 0.25 basis point increase or decrease is used when reporting interest rate risk internally to key management personnel and represents management’s assessment of the reasonably possible change in interest rates.

If interest rates had been 0.25 basis point higher/lower and all other variables were held constant, the Company’s pre-tax profit for the years ended December 31, 2022 and 2021 would have increased/decreased by $1,525 thousand and $1,545 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 Company. At the end of the year, the Company’s maximum exposure to credit risk, which would cause a financial loss to the Company due to the failure of the counterparty to discharge its obligation and due to the financial guarantees provided by the Company, could be equal to the carrying amount of the respective recognized financial assets as stated in the parent company only balance sheets.

The Company adopted a policy of dealing only with reputable parties and, where necessary, obtains appropriate guarantees to mitigate the risk of financial losses resulting from the default of payment. The Company assesses the creditability of the key customers bused on financial information available and mutual transaction records. The Company continuously monitors the credit risk and credit rating of the counterparties, distributes the total transaction amount to customers with sound credit ratings, and controls the credit risk by ensuring that each counterparty’s credit limit is reviewed and approved by the risk management committee.

The Company assesses the financial position of customers with outstanding accounts receivable balances regularly and requests for collateral if necessary.

The Company’s concentration of credit risk is mainly related to the top five largest customers, which represents 89% and 87% of total accounts receivable as of December 31, 2022 and 2021, respectively.

3) Liquidity risk

The Company manages liquidity risk by monitoring and maintaining a level of cash and cash equivalents deemed adequate to finance the Company’s operations and mitigate the effects of fluctuations in cash flows. In addition, management monitors the utilization of bank borrowings and ensures compliance with loan covenants.

The Company relies on bank borrowings as a significant source of liquidity. Refer to (b) below for the amount of unsecured short-term bank loan facilities of the Company as of December 31, 2022 and 2021:

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

The following table details the Company's remaining contractual maturities for its non-derivative financial liabilities with agreed repayment periods. The table has been drawn up based on the undiscounted cash flows of financial liabilities from the earliest date on which the Company can be required to pay. The table includes both interest and principal cash flows. Specifically, financial liabilities with a repayment on demand clause are included in the earliest time band regardless of the probability of the creditors choosing to exercise their rights. The maturity dates for other non-derivative financial liabilities are based on the agreed repayment dates.

December 31, 2022

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years
Non-derivative financial liabilities				
Non-interest bearing	$ 252,557	$ 181,739	$ 21,083	$ 301,602
Lease liabilities	-	5,740	11,752	5,010
	$ 252,557	$ 187,479	$ 32,835	$ 306,612

Additional information about the maturity analysis for lease liabilities

	Less than 1 Year	1-5 Years
Lease liabilities	$ 17,492	$ 5,010

December 31, 2021

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years
Non-derivative financial liabilities				
Non-interest bearing	$ 163,972	$ 133,607	$ 31,679	$ 4,765
Lease liabilities	-	6,918	20,017	25,871
Fixed interest rate liabilities	177	200,000	-	-
	$ 164,149	$ 340,525	$ 51,696	$ 30,636

Additional information about the maturity analysis for lease liabilities

	Less than 1 Year	1-5 Years
Lease liabilities	$ 26,935	$ 25,871

b) Financing facilities

	December 31	
	2022	2021
Unsecured bank loan facilities		
Amount used	$ -	$ 200,000
Amount unused	680,000	259,920
	$ 680,000	$ 459,920

29. TRANSACTIONS WITH RELATED PARTIES

Besides information disclosed elsewhere in the other notes, details of transactions between the Company and other related parties are disclosed as follows.

a. Related party name and category

Related Party Name	Related Party Category
Yinghon Technology Co.	Subsidiaries

b. Other payables to related parties

Item	Related Party Categories	December 31 2022	December 31 2021
Other payables from related parties	Subsidiaries	$ 12,563	$ 8,300

The outstanding trade payables to related parties are unsecured.

c. Other transactions with related parties

Item	Related Party Categories	For the Year Ended December 31 2022	For the Year Ended December 31 2021
Operation expenses	Subsidiaries	$ 66,886	$ 11,819

The Company entrusted subsidiaries to provide labor services such as business promotion. It is included in the operating expenses. No similar transactions with non-related parties can be referenced. The payment terms are 30 days, and the average credit period was 30 to 60 days.

d. Sales with related parties

Item	Related Party Categories	For the Year Ended December 31 2022	2021
Sales	Subsidiaries	$ 2,291	$ -

e. Remuneration of key management personnel

	For the Year Ended December 31 2022	2021
Short-term employee benefits	$ 55,948	$ 60,811
Post-employment benefits	1,188	1,081
	$ 57,136	$ 61,892

The remuneration of directors and key executives, as determined by the remuneration committee, is based on the performance of individuals and market trends.

30. ASSETS PLEDGED AS COLLATERAL OR FOR SECURITY

The following assets were provided as collateral for customs import goods tax and performance guarantee:

	December 31 2022	2021
Pledged deposits (classified as financial assets at amortized cost-non-current)	$ 9,900	$ 10,000

31. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

In addition to those disclosed in other notes, significant contingencies and unrecognized commitments of the Company at December 31, 2022 and 2021 were as follows:

a. Significant commitments

Under a sales agreement, the Company shall pay royalties at a certain percentage of net sales of certain products. Royalty expenses amounted to $1,349 thousand and $2,483 thousand for the years ended December 31, 2022 and 2021, respectively.

32. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

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

December 31, 2022

	Foreign Currency	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 48,480	30.71	$ 1,488,821
Financial liabilities			
Monetary items			
USD	14,126	30.71	433,809

December 31, 2021

	Foreign Currency	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 27,479	27.68	$ 760,619
Financial liabilities			
Monetary items			
USD	11,059	27.68	306,113

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

	For the Year Ended December 31, 2022		For the Year Ended December 31, 2021	
Foreign Currency	Exchange Rate	Net Foreign Exchange Gains	Exchange Rate	Net Foreign Exchange Losses
USD	30.71	$ 46,827	27.68	$ 5,274

33. SEPARATELY DISCLOSED ITEMS

a. Information about significant transactions:

1) Financing provided to others: None

2) Endorsements/guarantees provided: None

3) Marketable securities held (excluding investments in subsidiaries, associates, and joint ventures): None

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

7) Total purchases from or sales to related parties amounting to at least NT$100 million or 20% of the paid-in capital: None

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

9) Trading in derivative instruments: None

b. Information on investees: Table 1

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 year, repatriations of investment income, and limit on the amount of investment in the mainland China area: Table 2

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 year

b) The amount and percentage of sales and the balance and percentage of the related receivables at the end of the year

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 year and the purposes

e) The highest balance, the ending balance, the interest rate range, and total current period interest with respect to the financing of funds

f) Other transactions that have a material effect on the profit or loss for the year or on the financial position, such as the rendering or receipt 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

RICHWAVE TECHNOLOGY CORP.

INFORMATION ON INVESTEES
FOR THE YEAR ENDED DECEMBER 31, 2022
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		Balance as of December 31, 2022			Net Loss of the Investee	Share of Loss	Note
				December 31, 2022	December 31, 2021	Number of Shares	%	Carrying Amount			
Richwave Technology Corp.	Minerva Technology Co.	Belize	Investment	$ 16,940 (USD 550 thousand)	$ 16,940 (USD 550 thousand)	-	100	$ 13,753	$ (402)	$ (402)	The Company’s subsidiary
Minerva Technology Co.	AEGIS LINK CORP.	USA	Selling and marketing	15,428 (USD 500 thousand)	15,428 (USD 500 thousand)	-	100	12,199	(407)	(407)	The Company’s subsidiary

Table 2

RICHWAVE TECHNOLOGY CORP. AND SUBSIDIARIES

Information on investments in Mainland China
FOR THE YEAR ENDED DECEMBER 31, 2022
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Investee Company	Main Businesses and Products	Paid-in capital	Method of Investment	Accumulated Outward Remittance for Investment from Taiwan as of January 1, 2022	Remittance of Funds		Accumulated Outward Remittance for Investment from Taiwan as of December 31, 2022	Net Income (Loss) of the Investee	% Ownership of Direct or Indirect Investment	Investment Gain (Loss)	Carrying Amount as of December 31, 2022	Accumulated Repatriation of Investment Income as of December 31, 2022	Note
					Outflow	Inflow							
Yinghon Technology Co. (Note)	Development, manufacturing and sales of ICs	$ 57,410 (US$ 2,000 thousand)	Direct Investment	$ 27,840 (US$ 1,000 thousand)	$ 29,570 (US$ 1,000 thousand)	$ -	$ 57,410 (US$ 2,000 thousand)	$ 3,367	100%	$ 3,367	$ 56,976	$ -	The Company's subsidiary

Accumulated Outward Remittance for Investment in Mainland China as of December 31, 2022	Investment Amount Authorized by Investment Commission, MOEA	Upper Limit on the Amount of Investment Stipulated by Investment Commission, MOEA
$ 57,410 (US$ 2,000 thousand)	$ 57,410 (US$ 2,000 thousand)	$1,423,590

Note: Shenzhen Richwave Technology Co. Ltd. was renamed to Yinghon Technology Co. in September 2021.

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RICHWAVE TECHNOLOGY CORP.

STATEMENT OF CASH AND CASH EQUIVALENTS
DECEMBER 31, 2022
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Item	Description	Amount
Cash on hand		$ 611
Cash in banks		
Demand deposits		330,817
Foreign currency deposits	Including USD 9,029 thousand @30.71 and RMB 430 thousand @4.408	279,172
Cash equivalents		
Time deposits with original maturities of 3 months or less	From 2022.10.17 to 2023.02.20, interest rates at 0.95%-5.02%, including USD 5,000 thousand @30.71 and NT$200,000 thousand	353,550
Total		$ 964,150

STATEMENT 2

RICHWAVE TECHNOLOGY CORP.

STATEMENT OF ACCOUNTS RECEIVABLE
DECEMBER 31, 2022
(In Thousands of New Taiwan Dollars)

Name	Nature	Amount
Client A	Sales of goods	$ 593,599
Client B	Sales of goods	175,338
Client C	Sales of goods	118,687
Others (Note)		170,327
		1,057,951
Less: Allowance for impairment loss		(12,200)
		$ 1,045,751

Note: The amount from each individual client included under 'Others' does not exceed 5% of the account balance.

RICHWAVE TECHNOLOGY CORP.

STATEMENT OF INVENTORIES
DECEMBER 31, 2022
(In Thousands of New Taiwan Dollars)

Item	Amount	
	Cost	Net Realizable Value
Finished goods	$ 259,574	$ 483,969
Work in process	267,130	554,265
Raw materials	400,758	750,935
	$ 927,462	$ 1,789,169

RICHWAVE TECHNOLOGY CORP.

STATEMENT OF CHANGES IN INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD
FOR THE YEAR ENDED DECEMBER 31, 2022
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

	Balance, January 1, 2022		Increase in Investment		Decrease in Investment				Balance, December 31, 2022				
Investee	Number of Shares (In Thousands)	Amount	Number of Shares (In Thousands)	Amount	Number of Shares (In Thousands)	Amount	Share of Profit or Loss	Exchange Differences on Translation of the Financial Statements of Foreign Operations	Number of Shares (In Thousands)	%	Amount	Net Asset Value	Remarks
Minerva Technology Co.	-	$ 12,769	-	$ -	-	$ -	$ (402)	$ 1,386	-	100	$ 13,753	$ 13,753	—
Yinghon Technology Co.	-	23,739	-	29,570	-	-	3,367	300	-	100	56,976	56,976	—
		$ 36,508		$ 29,570		$ -	$ 2,965	$ 1,686			$ 70,729	$ 70,729	

RICHWAVE TECHNOLOGY CORP.

STATEMENT OF CHANGES IN COST AND ACCUMULATED DEPRECIATION OF RIGHT-OF-USE ASSETS
FOR THE YEAR ENDED DECEMBER 31, 2022
(In Thousands of New Taiwan Dollars)

Item	Buildings
Cost	
Balance at January 1	$ 77,887
Disposals	(11,944)
Balance at December 31	$ 65,943
Accumulated depreciation	
Balance at January 1	$ 26,506
Additions	23,177
Disposals	(5,890)
Balance at December 31	$ 43,793
Carrying amount at December 31	$ 22,150

RICHWAVE TECHNOLOGY CORP.

STATEMENT OF ACCOUNTS PAYABLE
DECEMBER 31, 2022
(In Thousands of New Taiwan Dollars)

Name	Nature	Amount
Vendor A	Raw materials	$ 108,843
Vendor B	Raw materials	80,086
Vendor C	Raw materials	51,557
Vendor D	Raw materials	44,699
Vendor E	Raw materials	28,002
Vendor F	Raw materials	19,557
Others (Note)		55,980
		$ 388,724

Note: The amount from each individual vendor included under 'Others' does not exceed 5% of the account balance.

RICHWAVE TECHNOLOGY CORP.

STATEMENT OF LEASE LIABILITIES
DECEMBER 31, 2022
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Item	Lease Term	Discount Rate	Amount
Buildings	August 2020 to May 2024	1.50%	$ 22,435
Less: Current portion			(17,420)
Non-current portion			$ 5,015

STATEMENT 8

RICHWAVE TECHNOLOGY CORP.

STATEMENT OF BONDS PAYABLE
DECEMBER 31, 2022
(In Thousands of New Taiwan Dollars)

					Amount						
Bonds Name	Trustee	Issuance Date	Interest Payment Date	Coupon Rate (%)	Total Amount	Repayment Paid	Balance, End of Year	Premiums (Discounts)	Carrying Value	Unamortized Repayment	Collateral
The 1st domestic unsecured convertible corporate bonds-2022	Taishin International Bank Co. Ltd.	2022.07.29	-	-	$ 300,000	$ -	$ 300,000	$ (13,707)	$ 286,293	Note 17	NA

RICHWAVE TECHNOLOGY CORP.

STATEMENT OF NET REVENUE
FOR THE YEAR ENDED DECEMBER 31, 2022
(In Thousands of New Taiwan Dollars)

Item	Quantity (In Thousands of Pieces)	Amount
WIFI products	892,525	$4,622,429
Others	148,550	261,295
		4,883,724
Less: Sales returns		(428,399)
Sales allowances		(1,026,125)
		$3,429,200

RICHWAVE TECHNOLOGY CORP.

STATEMENT OF OPERATING COSTS
FOR THE YEAR ENDED DECEMBER 31, 2022
(In Thousands of New Taiwan Dollars)

Item	Amount
Cost of self-produced goods sold	
Raw material, beginning of year	$ 691,122
Add: Raw material purchased	977,894
Less: Transferred to operating expenses or others	(21,798)
Raw materials, end of year	(400,758)
Raw material used	1,246,460
Manufacturing expenses	1,040,005
Manufacturing costs	2,286,465
Add: Work in process, beginning of year	323,328
Less: Transferred to operating expenses or others	(3,883)
Work in process, end of year	(267,130)
Cost of finished goods	2,338,780
Add: Finished goods, beginning of year	359,010
Less: Transferred to operating expenses or others	(67,710)
Finished goods, end of year	(259,574)
Operating costs - self-produced goods	2,370,506
Cost of merchandise sold	
Add: Merchandise purchased	255
Operating costs – buying and selling of merchandise	255
Less: Scrapped	(96)
Total operating costs	$ 2,370,665

RICHWAVE TECHNOLOGY CORP.

STATEMENT OF OPERATING EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2022
(In Thousands of New Taiwan Dollars)

Item	Selling and Marketing Expenses	General and Administrative Expenses	Research and Development Expenses
Salaries and bonuses (including pension costs)	$ 54,949	$ 127,329	$ 292,417
Professional service fees	33,839	74,230	456
Import and export fees	17,239	-	-
Commission	13,488	-	-
Sample fee	11,661	-	-
Depreciation and amortization	10,290	16,801	99,104
Research and development engineering expenses	-	-	91,768
Quality control fees	-	18,512	-
Research expense	-	-	51,077
Others (Note)	28,587	55,707	67,648
	$ 170,053	$ 292,579	$ 602,470

Note: The amount of each individual item in others does not exceed 5% of the account balance.

RICHWAVE TECHNOLOGY CORP.

STATEMENT OF LABOR, DEPRECIATION AND AMORTIZATION BY FUNCTION
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
(In Thousands of New Taiwan Dollars)

	For the Year Ended December 31, 2022		For the Year Ended December 31, 2021	
	Classified as Operating Costs	Classified as Operating Expenses	Classified as Operating Costs	Classified as Operating Expenses
Labor costs				
Salary costs	$ -	$ 455,970	$ -	$ 442,653
Labor and health insurance	-	33,840	-	32,082
Pension costs	-	18,725	-	17,768
Board compensation	-	673	-	5,790
Others	-	13,138	-	15,128
	$ -	$ 522,346	$ -	$ 513,421
Depreciation	$ 499	$ 95,737	$ 4,119	$ 80,218
Amortization	$ -	$ 30,458	$ -	$ 27,059

Note 1: As of December 31, 2022 and 2021, the Company had 312 and 332 employees, respectively, which included 5 and 4 non-employee directors, respectively.

Note 2: Average labor costs for the years ended December 31, 2022 and 2021 were $1,699 thousand and $1,548 thousand, respectively.

Note 3: Average salary costs for the years ended December 31, 2022 and 2021 were $1,485 thousand and $1,350 thousand, respectively.

Note 4: The average salary costs increased by 10% year over year.

Note 5: In the year ended December 31, 2020, the Company established the audit committee, and therefore there were no supervisors.

Note 6: The role of the remuneration committee of the Company is to evaluate the remuneration policy and system of the Company’s directors and managerial officers in a professional and objective manner. The members of the remuneration committee shall meet at least twice a year, and may convene a meeting at any time as needed to make recommendations to the board of directors for reference in their decision-making.

(Continued)

a. Responsibilities of the Company's remuneration committee

1) Review the remuneration policies of the Company and propose amendments on a regular basis.

2) Set and review the policies, systems, standards and structures of the performance appraisal and remuneration of directors and managerial officers on a regular basis.

3) Regularly evaluate the remuneration of the directors and managerial officers.

b. The remuneration committee shall carry out its responsibilities in accordance with the following:

1) Ensure that the remuneration arrangements comply with the relevant regulations and are sufficient to attract outstanding talent.

2) Take into consideration the typical salary levels of comparable companies and the reasonableness of the connection between individual performance and the Company's operating performance and future risk exposure when evaluating the performance and setting the remuneration packages of directors and managerial officers.

3) The remuneration package should not be set in such a way that it produces an incentive for the directors and managerial officers to engage in activities that exceed the Company's risk appetite in the pursuit of higher remuneration.

4) Take into consideration the characteristics of the industry and the nature of the Company's business when determining the ratio of bonus payouts based on the short-term performance of its directors and senior managerial officers and the time of payment of the variable part of remuneration.

5) Members of the remuneration committee shall not participate in the discussion and voting on their individual remuneration packages.

(Concluded)

VI. In the Most Recent Fiscal Year and Up to the Date of Publication of the Annual Report, Any Financial Difficulties Experienced by the Company or Its Affiliates and How Said Difficulties Will Affect the Company's Financial Situation

None.

Chapter VII. Review and Analysis of the Company's Financial Position and Financial Performance, and Listing of Risks

I. Financial Position Review and Analysis

1. Financial analysis - consolidated:

Unit: NT$ thousands

Item / Year	2021	2022	Difference	
			Amount of increase (decrease)	Percentage of increase (decrease)
Current assets	2,811,097	3,092,539	281,442	10%
Property, plant, and equipment	192,678	189,182	(3,496)	(2%)
Intangible assets	24,934	14,876	(10,058)	(40%)
Other assets	274,456	151,397	(123,059)	(45%)
Total assets	3,303,165	3,447,994	144,829	4%
Current liabilities	872,290	771,831	(100,459)	(12%)
Non-current liabilities	33,011	303,513	270,502	819%
Total liabilities	905,301	1,075,344	170,043	19%
Share capital	884,689	901,689	17,000	2%
Capital reserve	416,354	626,298	209,944	50%
Retained earnings	1,098,194	844,350	(253,844)	(23%)
Other shareholders' equity	(1,373)	313	1,686	(123%)
Total shareholders' equity	2,397,864	2,372,650	(25,214)	(1%)

The main reasons for increase or decrease of more than 20% are provided below:

1. Reduction in intangible assets: Chiefly attributable to additional purchases of R&D software during the previous year, as well as reduced demand for such purchases during the current period.
2. Reduction in other assets: Chiefly attributable to an increase in amortized financial assets carried at cost - non-current and deferred income tax assets.
3. Increase in non-current liabilities: Chiefly attributable to the issuance of first domestic unsecured convertible corporate bonds during the year.
4. Increase in capital reserve: Chiefly through the issuance of 1,700,000 new share s this year.
5. Reduction in retained earings: Mainly due to the decrease net profit after tax of the current year.
6. Reduction in other items of shareholder equity: Chiefly attributable to exchange difference fluctuations on the financial statements of foreign operating organizations due to exchange rate fluctuations.

2. Financial analysis - parent company only:

Unit: NT$ thousands

Item \ Year	2021	2022	Difference	
			Amount of increase (decrease)	Percentage of increase (decrease)
Current assets	2,783,431	3,027,318	243,887	9%
Property, plant, and equipment	190,251	184,910	(5,341)	(3%)
Intangible assets	24,934	14,876	(10,058)	(40%)
Other assets	302,602	216,026	(86,576)	(29%)
Total assets	3,301,218	3,443,130	141,912	4%
Current liabilities	872,960	767,699	(105,261)	(2%)
Non-current liabilities	30,394	302,781	272,387	896%
Total liabilities	903,354	1,070,480	167,126	19%
Share capital	884,689	901,689	17,000	2%
Capital reserve	416,354	626,298	209,944	50%
Retained earnings	1,098,194	844,350	(253,844)	(23%)
Other shareholders' equity	(1,373)	313	1,686	(123%)
Total shareholders' equity	2,397,864	2,372,650	(25,214)	(1%)

The main reasons for increase or decrease of more than 20% are provided below:

1. Reduction in intangible assets: Chiefly attributable to additional purchases of R&D software during the previous year, as well as reduced demand for such purchases during the current period.
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3. Increase in non-current liabilities: Chiefly attributable to the issuance of first domestic unsecured convertible corporate bonds during the year.
4. Increase in capital reserve: Chiefly through the issuance of 1,700,000 new share s this year.
5. Reduction in retained earings: Mainly due to the decrease net profit after tax of the current year.
6. Reduction in other items of shareholder equity: Chiefly attributable to exchange difference fluctuations on the financial statements of foreign operating organizations due to exchange rate fluctuations.

II. Financial Performance

1. Financial performance analysis - consolidated:

Unit: NT$ thousands

Item/Year	2021	2022	Amount of increase (decrease)	Percentage of increase (decrease)
Net operating revenue	5,316,267	3,429,371	(1,886,896)	(35%)
Operating costs	3,770,235	2,370,781	(1,399,454)	(37%)
Gross operating profit	1,546,032	1,058,590	(487,442)	(32%)
Operating expenses	1,012,424	1,075,795	63,371	6%
Operating profit	533,608	(17,205)	(550,813)	(103%)
Non-operating income and expenses	(6,702)	78,494	85,196	(1,271%)
Net profit before tax	526,906	61,289	(465,617)	(88%)
Income tax expenses	61,389	6,230	(55,159)	(90%)
Current net profit	465,517	55,059	(410,458)	(88%)

The main reasons for increase or decrease of more than 20% are provided below:

1. Reduction in net operating revenue: Chiefly attributable to delays in WiFi main chip delivery time this year, which caused a reduction in net operating revenue.
2. Reduction in operating costs: Chiefly attributable to the reduction in operating revenue this year.
3. Reduction in operating profit: Chiefly attributable to variance in product mix.
4. Reduction in operating profit: Chiefly attributable to the reduction in the year's operating revenue, as well as the increase in R&D expenses compared with the previous year.
5. Increase in non-operating income and expenditures: Chiefly attributable to the increase of NT$12,454,000 in interest income generated by banks deposits this year compared with the previous year.
6. Reduction in in net profit before tax: Chiefly attributable to the reduction in net operating revenue during the year.
7. Reduction in income tax expenses: Chiefly attributable to the reduced net profit before tax during the year.
8. Reduction in current period net profit: Chiefly attributable to the reduction in operating revenue and increase in operating expenses during the year.

2. Financial analysis - parent company only:

Unit: NT$ thousands

Item/Year	2021	2022	Amount of increase (decrease)	Percentage of increase (decrease)
Net operating revenue	5,316,267	3,429,200	(1,887,067)	(35%)
Operating costs	3,770,235	2,370,665	(1,399,570)	(37%)
Gross operating profit	1,546,032	1,058,535	(487,497)	(32%)
Operating expenses	1,008,098	1,077,228	69,130	7%
Operating profit	537,934	(18,693)	(556,627)	(103%)
Non-operating income and expenses	(11,028)	79,979	91,007	(825%)
Net profit before tax	526,906	61,286	(465,620)	(88%)
Income tax expenses	61,389	6,227	(55,162)	(90%)
Current net profit	465,517	55,059	(410,458)	(88%)

The main reasons for increase or decrease of more than 20% are provided below:

1. Reduction in net operating revenue: Chiefly attributable to delays in WiFi main chip delivery time this year, which caused a reduction in net operating revenue.
2. Reduction in operating costs: Chiefly attributable to the reduction in operating revenue this year.
3. Reduction in operating profit: Chiefly attributable to variance in product mix.
4. Reduction in operating profit: Chiefly attributable to the reduction in the year's operating revenue, as well as the increase in R&D expenses compared with the previous year.
5. Increase in non-operating income and expenditures: Chiefly attributable to the increase of NT$12,454,000 in interest income generated by banks deposits this year compared with the previous year.
6. Reduction in in net profit before tax: Chiefly attributable to the reduction in net operating revenue during the year.
7. Reduction in income tax expenses: Chiefly attributable to the reduced net profit before tax during the year.
8. Reduction in current period net profit: Chiefly attributable to the reduction in operating revenue and increase in operating expenses during the year.

3. Expected sales, possible impact on the Company's future financial operations and response plans: No material impact expected based on evaluations.

III. Cash Flow Analysis

1. Cash flow analysis - consolidated:

Unit: NT$ thousands

Initial cash balance	Annual net cash flow from operating activities	Annual net cash outflow due to investing and financing activities	Cash balance	Remedial measures for cash inadequacy	
				Investment plan	Financial plan
641,340	372,184	1,779	1,015,303	—	—

1. Analysis of annual cash flow changes in this year:
   (1) Operating activities: The increase in cash flow from operating activities compared with the previous year was chiefly attributable to this year's efforts to digest inventory.
   (2) Investing activities: Chiefly attributable to the disposition of amortized financial assets carried at cost.
   (3) Other financing activities: Chiefly attributable to the issuance of convertible bonds and implementation of a cash capital increase, and repayment of short-term loans during the year, as well as to the issuance of cash dividends; financing activities resulted in a net cash outflow of NT$$55,730,000.
2. Remedy for cash shortage and liquidity analysis: Not applicable.
3. Cash liquidity analysis for the next year:
   (1) Cash inflow from operating activities of NT$300,000 thousand: Mainly due to net operating profit.
   (2) Cash outflow from investing activities of NT$200,000 thousand: Mainly due to increased capital expenditures.
   (3) Cash inflow from investing activities amounted to NT$100,000 thousand.

2. Cash flow analysis - parent company only:

Unit: NT$ thousands

Initial cash balance	Annual net cash flow from operating activities	Annual net cash outflow due to investing and financing activities	Cash balance	Remedial measures for cash inadequacy	
				Investment plan	Financial plan
618,543	363,995	(18,388)	964,150	—	—

1. Analysis of annual cash flow changes in this year:
   (1) Operating activities: The increase in cash flow from operating activities compared with the previous year was chiefly attributable to this year's efforts to digest inventory.
   (2) Investing activities: Chiefly attributable to the disposition of amortized financial assets carried at cost.
   (3) Other financing activities: Chiefly attributable to the issuance of convertible bonds and implementation of a cash capital increase, and repayment of short-term loans during the year, as well as to the issuance of cash dividends; financing activities resulted in a net cash outflow of NT$$55,730,000.
2. Remedy for cash shortage and liquidity analysis: Not applicable.
3. Cash liquidity analysis for the next year:
   (1) Cash inflow from operating activities of NT$300,000 thousand: Mainly due to net operating profit.
   (2) Cash outflow from investing activities of NT$200,000 thousand: Mainly due to increased capital expenditures.
   (3) Cash inflow from investing activities amounted to NT$100,000 thousand.

IV. Effect Upon Financial Operations of Any Major Capital Expenditures During the Most Recent Fiscal Year

None.

V. Company Reinvestment Policy for the Most Recent Fiscal Year, Main Reasons for Profits/Losses Generated Thereby, Plan for Improving Re-investment Profitability, and Investment Plans for Coming Year

(1) Re-investment policy

The re-investment policy of the Company is based on its business operation and not to be engaged in business of other industries. The Company has established, "Investment cycle" and "Acquisition or Disposal of Assets". If there are relevant investment plans, it will follow the above stipulations.

(2) The main reasons for the profits/losses generated thereby, the plan for improving reinvestment profitability

Unit: NT$ thousands

Name of reinvested	Ownership (%)	Investment Gain (Loss)	Mainly due to currency exchange loss and increase in valuation costs	Improvement plan
Minerva Technology Co . (Belize)	100%	(402)	Recognize the investment loss, accounted for using equity method	NA
AEGIS LINK CORP. (U.S.A)	100%	(407)	The business is not enough to support operating expenses	To develop new sales channels
YingHon Technology Corp. (Shenzhen)	100%	3,367	The business is not enough to support operating expenses	To develop new sales channels

(3) Investment plans for the coming year The Company does not have any concrete investment plan. If there is any investment plan, it will follow the stipulations.

VI. Risk Analysis and Assessment

(I) Effect upon the company's profits (losses) of interest and exchange rate fluctuations and changes in the inflation rate, and response measures to be taken in the future:

1. Impact of changes in interest rates:

The Company readily observes the effects of changes in financial market interest rates on cash flow and takes response measures based on actual requirements.

2. Impact of changes in exchange rates:

The Company's sales revenue and procurement expenditures are mostly denominated in USD and we use foreign-currency assets to offset foreign-currency liabilities to achieve natural hedging. The Company also closely monitors information on exchange rate changes and exchange rate developments in order to adjust foreign-currency assets and liabilities in accordance with developments in the global macroeconomic environment, exchange rates, and future capital demand. These measures are taken to evade exchange rate risks and reduce the impact of exchange rate changes on the Company's profit and loss.

3. Inflation:

The Company closely monitors the fluctuations in the materials market and product prices and has not experienced any immediate major impact from inflation at home or abroad.

(II) The Company's policy regarding high-risk investments, highly leveraged investments, loans to other parties, endorsements, guarantees, and derivatives transactions; the main reasons for the profits/losses generated thereby; and response measures to be taken in the future:

The Company has established the "Procedures for Acquisition and Disposal of Assets", "Procedures for Loans and Making Endorsements and Guarantees", and "Procedures for Engaging in Transactions of Derivative Products" as the standards for related operations and these regulations have been passed in resolutions of the shareholders' meeting. The Company has not engaged in any high-risk, high-leverage investment, loans to other parties, endorsements and guarantees, or transaction in derivative products in the past year and as of the publication date of the Annual Report.

(III) Future R&D plans and expected R&D expenditures:

(1) Future R&D projects:

Item	Main Functions and Specifications
RFIC FEMs for WiFi and LTE applications	● RF components include LNAs, PAs, and switches. ● Front-end module.
FEM systems for mobile phone applications	● Power amplifier module. ● Front-end module. ● B. Digital chips for FM radio applications.
SOC and tuner for wireless video and audio applications	● Low-power and high-performance video and audio compression SOC and high-speed digital radio transceiver chips for high-resolution wireless video and audio applications. ● Digital radio RF front-end components.
Chips for applications related to hand-held systems.	● Short-distance, low power consumption, and interference-resistant wireless communication chips and chips for applications related to hand-held systems.

(2) Estimated R&D expenditures:

The Company plans to invest approximately NT$650,000 thousand in R&D expenditures in 2023 and we shall continue to maintain growth in R&D expenditures based on the development progress of new products and new technologies to maintain our competitive advantages.

(IV) The impacts of changes of important domestic and foreign policies and laws on the Company's finances and business, and the measures to be taken in response:

1. The Company complies with all related domestic and foreign laws and regulations in day-to-day operations and continuously pays close attention to domestic and foreign policy development trends and changes in legislation to fully understand changes in the market environment. Therefore, the Company's finance and business have not been affected by major changes in government policies and laws at home and abroad in the most recent year.
2. IFRS implementation schedule and measures to be taken in response: The Company has prepared the financial statements in accordance with the International Financial Reporting Standards (IFRS) since 2013.

(V) Effect on the company's financial operations of developments in science and technology (including cybersecurity), as well as industrial change, and measures to be taken in response:

The Company continuously monitors technological changes and developments in the industry and quickly gains information on industry developments.

RichWave continuously enhances its R&D capabilities, applies for patent protection for various innovative concepts and design developments, and actively expands future market applications to counter the impact of technological changes and industry changes on the Company.

The Company has established a cross-departmental information security management team to enhance information security management, with the president as the convener, the information department and the administration department as the leader and planner, and each business-related unit as the executor. The information security team holds regular meetings to review the implementation status of the Company's information security system. It is required to report to the Board of Directors at least once a year on the implementation status of the Company's information security affairs to obtain advice and guidance from the highest level of the Company, thereby ensuring the effectiveness of the Company's information security management operations.

(VI) Effect on the company's crisis management of changes in the company's corporate image, and measures to be taken in response:

Since the establishment of the Company, we have complied with related regulations, actively enhanced internal management, improved management quality and performance, and maintained harmonious employer-employee relations to maintain a good corporate image. There has been no incident that affected our corporate image.

(VII) Expected benefits and possible risks of merger and acquisition, and measures to be taken in response: Not applicable.

(VIII) Expected benefits and possible risks of facilities expansion, and measures to be taken in response: Not applicable.

(IX) Risks associated with over-concentration in purchase or sale and response measures:

The Company's procurement is concentrated due to concerns in product quality and preferred purchasing price, though the Company maintains at least two suppliers for its main materials avoid risks resulting from over-concentration in purchasing. In addition, the concentration of the Company's sales is mainly due to the distributors' sales to customers in Taiwan and China. To mitigate the risks of over-concentration of sales, the Company also actively develops customers with long-term cooperation and carefully selects customers of excellent financial background to lower the risks of over-concentration of sales.

(X) Impact and risk associated with large share transfers or changes in shareholdings of directors, supervisors, or shareholders who hold more than 10% of the Company's shares, and response measures: None.

(XI) Impact and risk associated with changes in management rights, and response measures: Not applicable.

(XII) Litigation or non-litigation events: None.

(XIII) Other significant risks and response measures:

1. Risk Management Organization Framework

Richwave Technology Corp. has established a cross-unit Business Continuity Planning (BCP) team with representatives from each business unit as the team members and the general manager serving as the general convener of the team. The BCP team had conducted rigorous risk assessments for the major risks that the Company may encounter to formulate response strategies, arranges emergency response measures, and conduct irregular drills to continue to improve and prevent potential major risk events from causing damage to the Company.

2. Risk Policy and Management Process

The Company has established the “Risk Management Policy and Procedures,” which was approved by the board of directors on December 23, 2021. The goals are to enable Richwave’s management team to operate proactively and cost-effectively; integrate and manage all potential strategy, operation, financial, and hazard-related risks that may affect operation integration and profits; and strengthen the board’s function directors to implement risk management supervision. The Company has assessed and managed various risk factors through risk identification, analysis, assessment, response, control, and supervision procedures. We will continue to regularly observe the impact that emerging risks may have on the Company to fully grasp the scope of each risk, take appropriate measures, and allocate resources appropriately to ensure that the relevant risks are properly managed.

3. Risk item identification and management

By analyzing the global atmosphere, industry pulse, regulatory trends, and the Company's current status, Richwave has identified risk items under 5 major orientations: strategy, operation, finance, hazard events, and regulatory compliance. The items are as follows:

Strategic Aspect	Operation Aspect	Financial Aspect	Hazardous Incident Aspect	Regulation Compliance Aspect
1. Industrial change and technological innovation 2. Short-range technology R&D and competition status 3. Policy or law changes 4. Global political and economic development	1. Market demands 2. Continual operation risks for the enterprise (i.e., operation interruption, supply chain interruption, production chain interruption risks) 3. Information security 4. Supplier management 5. Intellectual property rights 6. Credit risk (including clients and suppliers) 7. Corporate image 8. Capital loan to others & endorsement guarantee 9. Strategic investment	1. Interest rates, exchange rates, & inflation 2. Funding liquidity 3. High-risk/high-leverage financial investment, derivative financial commodity trading	1. Climate change, sudden natural disasters 2. Occupational safety and hygiene 3. Fire or other man-made disasters (i.e., use of hazardous substances in products and processes) 4. Impacts by pandemic infectious diseases 5 Water & electricity supplier	1. Company Act, Securities and Exchange Act, Business Entity Accounting Act, insider trading 2. Financial Reporting Process 3. Personal Data Protection Act

VII. Other Important Matters

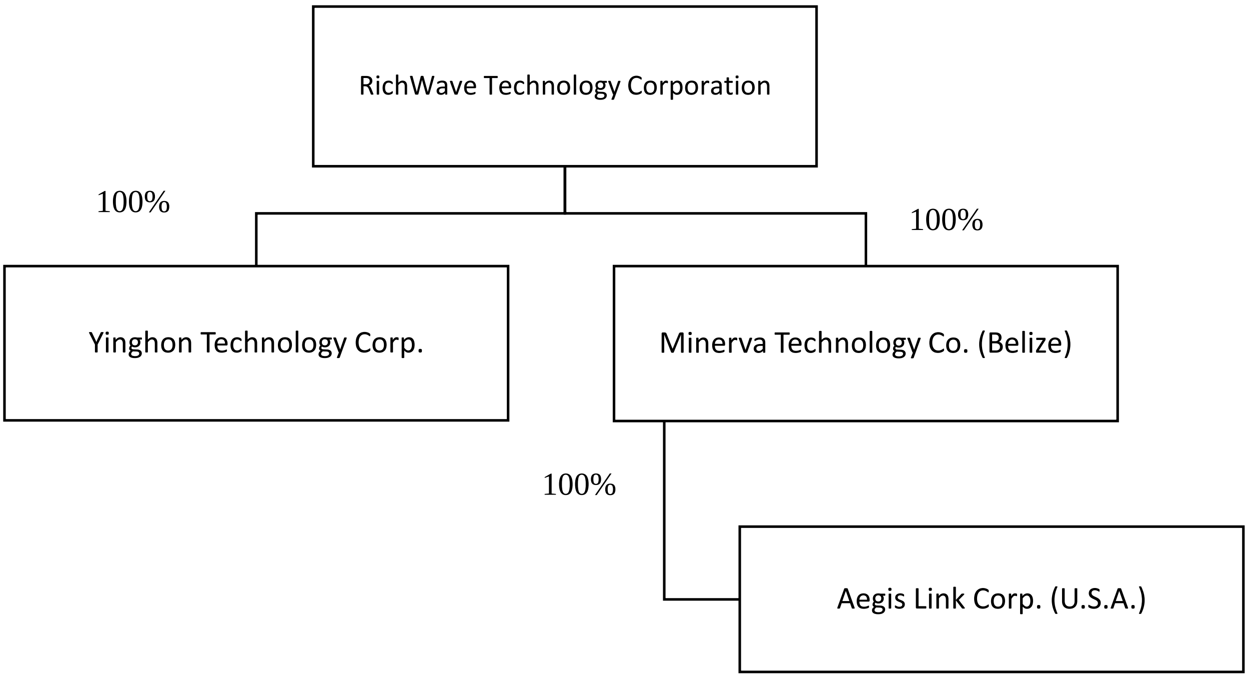
None

Chapter VIII. Special Disclosure

I. Information on the Company Affiliates

(I) Consolidated business report of affiliates:

1. Organization chart of affiliates: Dec. 31, 2022



2. Basic information of affiliates:

Dec. 31, 2022; Unit: foreign currency

Enterprise name	Date established	Address	Paid-in capital	Main business or products
Minerva Technology Co. (Belize)	Dec. 2018	Belize	USD 550,000	Investment holding company
Aegis Link Corp. (U.S.A.)	Jan. 2019	United States	USD 500,000	Business promotion
Yinghon Technology Corp. (Shenzhen)(Note1)	May. 2021	Mainland China	USD2,000,000	Dsign and sale of integrated circuits (ICs)

Note1:In May 2021, the Company established Shenzhen Richwave Technology Co. Ltd. in Shen Zhen with an investment of USD1,000 thousand. Shenzhen Richwave Technology Co. Ltd. was renamed to Yinghon Technology Co. in September 2021.

3.The Company does not have affiliates for which it is presumed as having control and subordinate relationships specified in Article 369-3 of the Company Act.

4. Industries covered by the business operations of affiliates:

The business operations of the Company and affiliates include the design, sales, and business promotion of integrated circuits (ICs) for wireless telecommunication products. The main business operations of the Company's affiliates mainly include R&D and sales of RFIC front-end modules (FEMs) for WiFi connectivity solutions (including power amplifiers, low noise amplifiers, switches, and integrated FEMs) and 2.4GHz wireless video and audio transmission RFIC and SOC and general investment.

5. Information on directors, supervisors, and general managers of affiliates:

Enterprise name	Title	Name or representative	Shareholding	
			Shares	Shareholding ratio
Minerva Technology Co. (Belize)	Director	Dye-Jyun Ma	0	0%
Aegis Link Corp. (U.S.A.)	Director	Dye-Jyun Ma	0	0%
Yinghon Technology Corp. (Shenzhen)	Legal representative	Dye-Jyun Ma	0	0%

6. Overview of the operations of affiliates:

As of Dec. 31, 2022; Unit: in thousand NTD except for EPS

Enterprise name	Capital	Total value of assets	Total value of liabilities	Net worth	Operating revenue	Operating profit	Current profit and loss (after tax)	EPS (NT$) (after tax)
Minerva Technology Co. (Belize)	16,940	13,753	0	13,75.	0	0	(402)	0
Aegis Link Corp. (U.S.A.)	15,428	12,199	0	12,199	0	0	(407)	0
Yinghon Technology Corp (Shenzhen)	57,410	74,404	17,428	56,976	65,668	63,261	3,367	0.59

(II) Consolidated financial statement of affiliates:

For the year 2022 (from Jan. 1 to Dec. 31, 2022), the Company's entities that are required to be included in the consolidated financial statements of affiliated enterprises under the "Criteria Governing Preparation of Consolidated Business Report of Affiliated Enterprises, Consolidated Financial Statements of Affiliated Enterprises, and Affiliation Reports" are the same as those required to be included in the parent-subsidiary consolidated financial statements under the International Financial Reporting Standards 10. Moreover, the related information required to be disclosed for the consolidated financial statements of affiliates has been fully disclosed in the aforementioned parent-subsidiary consolidated financial statements. Consequently, a separate set of consolidated financial statements of affiliated enterprises is not prepared (refer to page 141 to 263).

(III) Affiliation Report: Not applicable.

II. Private Placement of Securities During the Most Recent Fiscal Year or During the Current Fiscal Year up to the Date of Publication of the Annual Report

None

III. Holding or Disposal of Shares in the Company by the Company's Subsidiaries During the Most Recent Fiscal Year or During the Current Fiscal Year up to the Date of Publication of the Annual Report

None.

IV. Other Supplementary Information

None.

Chapter IX. Situations Listed in Article 36, Paragraph 2, Subparagraph 2 of the Securities and Exchange Act Which Might Materially Affect Shareholders' Equity or the Price of the Company's Securities Occurring During the Most Recent Fiscal Year or During the Current Fiscal Year up to the Date of Publication of the Annual Report

None.