



**Stock Code: 4991**

GCS Holdings, Inc.

# 2022 Annual Report

Publication date: April 8, 2023

Annual report inquiry website: <http://mops.twse.com.tw/>  
<http://www.gcsincorp.com/>

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II. Board Director List

Title	Name	Title	Name	Nationality of independent director
Chairman	Huang, Ta-Lun	Independent Director	Tseng, Tsung-Lin	R.O.C.
Director	Ann, Bau Hsing	Independent Director	Yang, Jung-Kung	R.O.C.
Director	Shih, Wei	Independent Director	Cheng, Jian-Jong	R.O.C.
Director	Lee, Biing Jye			

Please refer to pages 19-23 of this annual report for the main experiences of each director.

III. Address and telephone number of the Company

GCS Holdings, Inc.  
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Tel.: (1) 310-5307274  
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Address: 23155 Kashiwa Court, Torrance, California 90505, USA  
Tel.: (1)310-5307274  
Taiwan subsidiary: GCS Device Technologies, Co., Ltd.  
Address: 7F-5, No. 738, Zhongzheng Rd., Zhonghe Dist., New Taipei City  
Tel.: (886)2-8228-0488  
USA Subsidiary: D-Tech Optoelectronics, Inc.  
Address: 18062 Rowland St., City of Industry, CA 91748 USA  
Tel.: (1)626-269-1102  
Taiwan Subsidiary: D-TECH Optoelectronics (Taiwan) Corporation  
Address: 1F., No. 1, Nanyuan 2<sup>nd</sup> Rd., Zhongli Dist., Taoyuan City  
Tel.: (886)3-4345088  
Taiwan subsidiary: GCOM Semiconductor Co., Ltd.  
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Tel.: (886)3-4345088

IV. Name, address, telephone number, and website of the stock transfer agency:

Name: Stock Affairs Department of CTBC Bank  
Address: 5F., No. 83, Sec. 1, Chongqing S. Rd., Zhongzheng Dist., Taipei City  
Tel.: (886)2-6636-5566  
Website: www.chinatrust.com.tw

V. Name, firm, address, telephone number, and website of the CPA attesting the most recent annual financial statements:

CPAs: Ms. Bai, Shu-Chian and Ms. Cheng, Ya-Huei  
CPA Firm: PricewaterhouseCoopers Taiwan  
Address: 27F, No. 333, Sec. 1, Keelung Road, Taipei City  
Tel.: (886)2-2729-6666  
Website: www.pwc.com

VI. The name of any exchanges where the Company's securities are listed offshore, and the method by which to access information on the offshore securities:

Global Depositary Receipts (GDR)  
Trading venue: Luxembourg Stock Exchange  
Website: www.bourse.lu/Accueil.jsp

VII. Company's website: <http://www.gcsincorp.com/>

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## **One. Letter to Shareholders**

### **Dear shareholders:**

The overall 2022 revenue for GCS Holdings, Inc. was up by approximately 7.92%, compared with that of 2021. The growth was up 1.43% in terms of US dollars. In view of the product array, the 2022 sales revenue in RF wafer foundry was up approximately 15%, mainly consisting of orders driven from the company's proprietary Gallium nitride (GaN), bulk acoustic wave filter (BAW Filter) and other advanced processing. With regards to the optoelectronic wafer foundry, the 2022 revenue was also up by approximately 6% compared with that of 2021. The sales revenue for GCS's own-brand component (KGD) was down by approximately 14%, mainly due to the intense competition in the pricing of the optoelectronic market, declined selling price, slowing decreasing demand for the installation of 5G base stations in China, inflationary spike affecting market demand, and customer's inventory adjustment. Such factors drove the sales revenue for GCS's own-brand components to decrease.

The source of GCS's operating income mainly comes from its production base, the 4-inch wafer fabrication foundry located in California, U.S.A. Due to limited capacity, the fabrication foundry has undergone strategic investment projects over the past few years and expanded the 6-inch wafer foundry capacity through the joint venture. To cope with the changes in international trade situations, GCS's investment distribution offers clients choices of production sites in different regions such as the U.S., China and Taiwan, in order to expand the business scale and strengthen corporate competitiveness. GCS started investing in Unikorn Semiconductor Corporation (Unikorn) since March 2019, namely sustaining the development of the strategic investment division. In 2022, GCS raised TWD700 million in cash as an investment in Unikorn and as of the end of 2022, the total cash invested in Unikorn was TWD1,664 million, with a shareholding ratio of 42.06%. The wafer foundry business of Unikorn includes optoelectronic, microwave, filtering components, and other products. Unikorn has made significant progress in upgrading capacity, processing improvement, and approaching new customers, as well as growth in sales revenue. Nonetheless, due to the delay in the certification schedule after product completion plus the impact of inflation, the demand for related consumer electronics products declined and hence the quantity of orders has not reached the proper economic scale that put the company still under a loss. Moreover, GCS started investing in ChangZhou ChemSemi Co., Ltd. (ChangZhou ChemSemi) in May 2020 and the GCS Board of Directors resolved in October 2021 to increase the investment in ChangZhou ChemSemi in the amount of RMB199 million. GCS completed the acquisition of investment equity in ChangZhou ChemSemi in 2022. As of the end of 2022, the cumulative amount invested in ChangZhou ChemSemi was RMB309 million, with a shareholding ratio of 24.21%. ChangZhou ChemSemi is based on the wafer foundry business for consumer electronics products. Currently, the Company is committed to expanding its capacity to increase sales revenue, however, the impact of COVID-19 delayed the progress of relevant equipment installation and the customer completion of certification before commitment to production. Moreover, the fabrication foundries and equipment are under construction with relatively higher costs and expenditures, hence the orders have not reached the economic scale and the operation is still under loss. GCS invested in Shanghai Galasemi Co., Ltd. (Shanghai Galasemi) in 2021. The purpose of this investment aimed to expand the production and sales of optoelectronic components. As of the end of 2022, the cumulative investment in Shanghai Galasemi was USD5.016 million, with a shareholding ratio of 48%.

GCS product array includes three categories: RF wafer foundry, optoelectronic wafer foundry, and KGD. GCS has long collaborated with multiple clients for the R&D of advanced processing technology. With regards to the RF wafer foundry, apart from the related advanced processing such as the income growth from the GaN and BAW filter foundry, the processing for

GaN/Si and BAW Filter was also successfully transferred to the 6-inch fabrication foundry of a joint venture. GCS also negotiates with clients positively in an attempt to pass the certification and receive orders for mass production. Looking into 2023, GCS will continue to develop the processing related to next-generation GaN HEMT and BAW Filter. With regards to KGD, GCS develops PIC ((Photonic Integrated Circuit) related, VCSEL, GaAs LD, and LnP Laser items to work on the orders for mass production, which scope of applications covers optical communication, medical care, 3D sensor, and Lidar. In terms of KGD, GCS will continue to develop high-margin optical communication products and radiation products high in products and applied at high speed. GCS will also offer solutions for cost optimization to increase profits and source of customers, thereby expanding the market share. Moreover, GCS will collaborate with strategic investment companies to introduce the products needed by customers into the production of 6-inch fabrication foundry.

With regards to finance, the GCS 2022 consolidated net operating revenue was TWD1,333,810 thousand, increase 7.92%, compared with TWD1,235,881 thousand in 2021. The 2022 gross profit was TWD314,929 thousand, down 8.73%, compared with TWD345,057 thousand in 2021. The 2022 operating loss was TWD 137,333 thousand, up 345.68%, compared with TWD30,814 thousand in 2021. The 2022 net loss attributed to the owners of the parent company was TWD939,717 thousand and the 2021 net loss attributed to the owners of the parent company was TWD 378,497 thousand, up 148.28%. The 2022 losses per share was TWD 8.53 and the 2021 losses per share was TWD4.20.

Looking into 2023, the world is facing an inflation spike that affects consumer demand while China–United States trade relation continues to oppose. In spite of the many challenges and variations faced by the environment, the optimistic market demand for third-generation compound semiconductor-related applications will drive future growth momentum. Although GCS still encounters losses in operation currently, the Company also constantly develops new products and boosts processing technology to improve the quality, yield rate, and production efficiency in order to control proper costs, expand sources of customers and boost profits as the objectives. Moreover, GCS collaborates with strategic reinvested companies to receive more customer orders and speed up the customer certification for mass production, so that reinvested companies will diminish loss, and increase the operating profits of the Company and shareholder interests as the ultimate goals.

Chairman: Huang, Ta-Lun



Chief Executive Officer: Ann, Bau Hsing



Accounting Officer: Mark L. Raggio



## Two. Company profile

### I. Incorporation date and Group profile

GCS Holdings, Inc. (hereinafter referred to as “the Company”) was incorporated in the Cayman Islands on November 30, 2010 in response to the application for Emerging Stock listing and the first-time listing in Taiwan. The Company had completed the stock exchange with the shareholders of Global Communication Semiconductors, Inc. (hereinafter referred to as the “GCS.C”) in the United States on December 28, 2010, and then became the parent company of GCS.C with 100% shareholding held.

GCS.C was incorporated in Torrance, California, USA in August 1997, and was renamed as “Global Communication Semiconductors, LLC” (hereinafter referred to as “GCS, USA”) on January 24, 2011. GCS, USA is the main operating entity of the Group, mainly engaged in GaAs/InP/GaN advanced RF foundry and optoelectronic device compound semiconductor wafer foundry, related intellectual property rights licensing, and the research, development, production, and sales of KGD-brand optoelectronic products.

The Company for the needs of developing new businesses had GCS Device Technologies Co., Ltd. incorporated on April 23, 2015 to engage in product design and related services.

In addition, GCS, USA, the subsidiary, acquired 100% equity of D-Tech Optoelectronics, Inc. and its subsidiary D-TECH Optoelectronics (Taiwan) Corporation in cash in July 2017. D-Tech Optoelectronics, Inc. is engaged in the development, production, and sale of avalanche photodiodes (APD). D-TECH Optoelectronics (Taiwan) Corporation is engaged in the packaging of optoelectronic devices, the production of telecommunication devices and electronic components, and wholesale and sale.

The Company for the needs of developing new businesses had GCOM Semiconductor Co., Ltd. incorporated on February 22, 2019 to engage in the wholesale and retail of electronic components, product manufacturing, and foundry management services.

### II. Company and Group History

Date	Events
August 1997	GCS, C was incorporated with a plant constructed in Torrence City, California, USA.
December 1998	InGaP HBT technology was successfully developed.
October 1999	Successfully qualified for ISO 9001-2000 certification.
May 2000	Successfully developed GaAs PIN Photodiode.
April 2001	Successfully developed high voltage InGaP HBT technology.
August 2001	Successfully developed InP HBT technology.
December 2001	Successfully developed InGaAs PIN photodiode.
April 2003	Started mass production of RF 0.5 $\mu$ m pHEMT Switch.
March 2004	Successfully developed the world’s fastest InP HBT technology (Ft > 300 GHz) for optical communication 40-100G Trans-impedance Amplifier (TIA) and high-speed test instrument IC.
August 2008	Started the GaAs concentrator photovoltaic wafer foundry business.
November 2010	Signed multiple technology transfer contracts for InGaP HBT and pHEMT with world-class silicon wafer foundries.
November 2010	GCS Holdings, Inc., the Group’s holding company, was incorporated in the Cayman Islands.

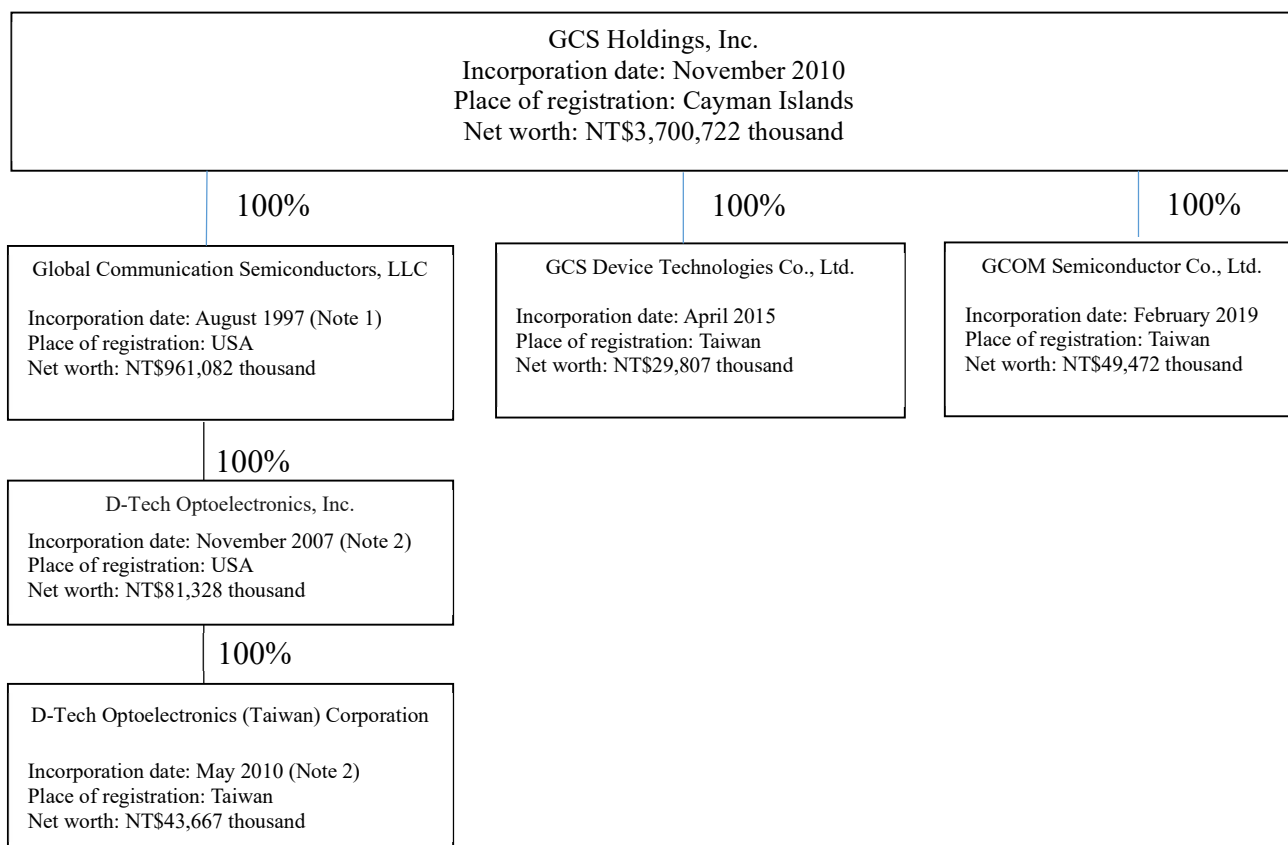
Date	Events
December 2010	The stock exchange between GCS Holdings, Inc. and GCS.C. was initiated. The stock capital of GCS Holdings, Inc. after the reorganization was NT\$306,946 thousand.
January 2011	GCS.C was renamed as "Global Communication Semiconductors, LLC."
February 2011	Obtained the GaN R&D plan from international Integrated Device Manufacturers (IDM).
August 2011	Successfully transferred multiple GaAs HBT and pHEMT technologies to a world-class silicon wafer foundries.
October 2011	Successfully obtained the certification of GaN/Si high-power RF devices from an US company.
February 2012	Obtained the HBT foundry orders for satellite communication electronics from international Integrated Device Manufacturers (IDM).
February 2013	Successfully developed high-voltage InGaP HBT P7 process for next-generation small cell base stations.
February 2013	SiC power electronics devices process had been successfully certified by customers.
March 2013	Successfully developed width-modulation VCO HBT.
July 2013	Signed a technology contract with American company D for GaN on SiC technology.
August 2013	Developed Super Low Noise E/D pHEMT for WLAN, GPS, DBS, and VSAT receivers.
September 2013	Successfully developed high-gain, high-efficiency and high-linearity InGaP HBT for 802.11ac and 3G/4G mobile phone power amplifiers.
March 2014	Successfully developed high frequency and higher breakdown strength 0.15 $\mu$ m GaN on SiC HEMT technology.
September 2014	Officially listed on the TPEX.
March 2015	Successfully developed low-loss millimeter-wave monolithic mixer diode.
April 2015	GCS Device Technologies, Co., Ltd. a subsidiary in Taiwan, was incorporated.
June 2015	Successfully developed high-performance Bulk Acoustic Wave Resonator.
August 2015	Initiated mass production of 25G 1310-1550nm InGaAs/InP PIN PD.
October 2015	Initiated mass production of 25G 850nm GaAs PIN PD.
December 2015	Successfully developed high-speed, low-loss planar RF PIN diode.
December 2015	Complete the Opto foundry process developments on 100G/400G InP-PIC and InP/Si-PIC.
March 2016	The board of directors resolved the merger with SAIC Acquisition, Inc., a 100% subsidiary of Xiamen San'an Integrated Circuit Co., Ltd.
July 2016	Initiated the mass production of SiC JFET.
August 2016	The board of directors resolved to terminate the merger with SAIC Acquisition, Inc., a 100% subsidiary of Xiamen San'an Integrated Circuit Co., Ltd. with a termination agreement signed.
September 2016	Initiated the "6-inch VCSEL wafer fab foundry."
November 2016	The board of directors resolved to have a joint venture contract signed with Xiamen San'an Integrated Circuit Co., Ltd., and jointly establish Xiamen Global Advanced Semiconductor Co, Ltd.
July 2017	GCS, USA, a subsidiary, acquired 100% equity of D-Tech Optoelectronics, Inc. and its subsidiary D-TECH Optoelectronics (Taiwan) Corporation in cash.
June 2018	The board of directors resolved to sign an equity transfer agreement to receive 2% equity of Xiamen Global Advanced Semiconductor Co, Ltd. transferred from Xiamen San'an Integrated Circuit Co., Ltd.



Date	Events
September 2018	Completed the acquisition of additional 2% equity of Xiamen Global Advanced Semiconductor Co, Ltd.
January 2019	Issued Global Depositary Receipts (GDR) on the Luxembourg Stock Exchange.
January 2019	Signed a strategic cooperation agreement with Epistar Corporation.
February 2019	GCOM Semiconductor Co., Ltd., a subsidiary in Taiwan, was incorporated.
March 2020	Xiamen Global Advanced Semiconductor Co, Ltd. has cancelled its business registration.
November 2020	Invested in Changzhou Galasemi Co., Ltd, a subsidiary in China.
July 2021	Changzhou Galasemi Co., Ltd, a subsidiary in China, was sold to Shanghai Galasemi Co., Ltd, a joint venture.
January 2022	A private placement has been completed to issue 20,000 thousand ordinary shares for cash capital increase.

### III. Investment structure

December 31, 2022



Data source: The 2022 Consolidated Financial Statements audited and attested by CPAs and those provided by the Company.

Note 1: Global Communication Semiconductors, Inc. was renamed as “Global Communication Semiconductors, LLC” in January 2011.

Note 2: Global Communication Semiconductors, LLC, a subsidiary, acquired 100% equity of D-Tech Optoelectronics, Inc. in cash in July 2017 with 100% equity of its subsidiary, D-Tech Optoelectronics (Taiwan) Corporation, acquired indirectly.

## IV. Risk matters

The Group is mainly engaged in GaAs/InP/GaN advanced RF foundry and optoelectronic devices wafer foundry, related intellectual property rights licensing, and the research, development, production, and sales of KGD. The Company is registered in the Cayman Islands, but without any real economic activity operated. The Group is mainly operated in the United States. The macroeconomy, changes in the political and economic environment, relevant laws and regulations, foreign exchange controls and taxes of the country where the Group is registered, the validity of the judgment of the court of the R.O.C., and the countermeasures adopted are explained below. Please refer to Section VI “Risk Management and Evaluation” in Seven. “Review and analysis of the financial status and financial performance and risks” for other risk matters in detail.

### (I) Place of registration: The Cayman Islands

#### 1. Changes in macroeconomy and political and economic environment

The Cayman Islands is a self-governing British Overseas Territory in the western Caribbean Sea, which is 268 kilometers northwest of Jamaica and 640 kilometers south of Miami. George Town is the capital city with the financial service industry as the main source of economic income; also, it has become the 5<sup>th</sup> largest financial center in the world after New York, London, Tokyo, and Hong Kong.

The Cayman Islands has maintained political stability for a long time, with English as its primary official language. The registered company types in the Cayman Islands can be classified into five categories: Ordinary Company, Ordinary Non-Resident Company, Exempted Company, Exempted Limited Duration Company, and Foreign Company. The Exempted Company is primarily used by companies and individuals from various countries for financial planning purposes, but they are not allowed to conduct business locally. Additionally, in recent years, the government of the Cayman Islands has actively strengthened the reputation of its offshore financial operations. In 1990, it signed the Mutual Legal Assistance Treaty with the United States and the United Kingdom to facilitate joint efforts in preventing international criminal organizations from engaging in illegal transactions through the financial system of the Cayman Islands.

In summary, the Company is an Exempted Company registered in the Cayman Islands without carrying out any actual operation locally. The Cayman Islands is with a stable political situation and is ranked the 5<sup>th</sup> largest financial center in the world. Changes in the macroeconomy and political and economic environment do not have a significant impact on the Company’s overall operation.

#### 2. Exchange controls, taxes, and related laws and regulations

The Cayman Islands is free of any foreign exchange restriction. An Exempted Company does not have to pay taxes to the Cayman Islands, except for the annual license fees. In terms of laws and regulations, the government of the Cayman Islands passed the International Tax Cooperation (Economic Substances) Act on December 27, 2018 (hereinafter referred to as the “Economic Substances Act”) with the Rules and

Directions (Version 1.0) published on February 22, 2019, and amended the Directions (Version 2.0) on 30 April 2019. According to the Economic Substances Act, specific companies (that is, “Relevant Entities” as defined by the Economic Substances Act) in the Cayman Islands that are engaging in specific activities (that is, “Relevant Activities” as defined by the Economic Substances Act) shall pass the tests related to the said relevant activities. The government of the Cayman Islands is expected to announce other rules and directions occasionally in the future to further clarify the important practical content and scope of the economic substance requirements. The impact of the “Economic Substances Act” is insignificant on the Company’s finances and operations currently. However, the impact of more rules and directions to be announced in the future is yet to be further observed and evaluated. The Company is and will continue to consult attorneys in the Cayman Islands for complying with the relevant provisions of the Economic Substances Act. In addition, the main regulations imposed on the exempted companies in the Cayman Islands are as follows:

- (1) Do not conduct business operations in the Cayman Islands.
- (2) An Exempted Company may not issue invitations to the people of the Cayman Islands to subscribe their shares or bonds; also, may not own land in the Cayman Islands.
- (3) According to the Company Act of the Cayman Islands, an annual regular shareholders meeting is not mandatory. The Company shall have the regular shareholders meeting and board meeting convened in accordance with the Company’s articles of association inside or outside the Cayman Islands. However, according to the Company’s articles of association (hereinafter referred to as the “AoA of the Listed Company”) adopted by the Company through a resolution at the shareholders' meeting on August 25, 2011, the Company is obligated to hold an annual general meeting of shareholders within six months after the end of each fiscal year. In addition, according to the “AoA of the Listed Company”, the shareholders’ meeting shall be convened at the time and place designated by the board of directors. Unless otherwise stipulated by laws and regulations, the shareholders’ meeting shall be convened within the territory of the Republic of China.
- (4) The issuance of new shares requires approval from the board of directors and/or shareholders meeting. According to the Company’s articles of association, the issuance of new shares should be limited to the Company’s authorized stock capital and requires the attendance of two-thirds or more of the directors at the board meeting, with the consent of the majority of the attending directors. Bearer shares shall not be issued.

- (5) An exempted company is not obliged to file or report shareholder information to the Registry of the Cayman Islands. However, according to the Company's articles of association, the board of directors shall maintain a register of shareholders at the Company's registered office (if applicable) and the Company's stock affairs agency in the Republic of China. Furthermore, according to the AoA of the Listed Company, the board of directors shall have the general register of shareholders placed at an adequate location inside or outside the Cayman Islands, which shall contain shareholder information and the number of shares held, including other particulars required by laws and regulations.
- (6) It is not mandatory to have the register of shareholders of an exempted company disclosed for public information. However, according to the Company's articles of association, except during the book closure period, the general register of shareholders and any supporting registers shall be made available for any shareholder to check his/her registration status during business hours. Shareholders may request to check or copy the designated section of the register free of charge by presenting the proof of interest supporting document.
- (7) An exempted company may apply to the Cayman Islands government to obtain a letter of commitment that the exempted company will not be taxed. The validity of the letter of commitment applied for the first time is for 20 years, and an application for renewal can be filed prior to the expiry date.
- (8) An exempted company can apply for deregistration and can have the registration transferred to another country.
- (9) An exempted company can be registered as an exempted limited duration company. There must be at least 2 shareholders in an exempt limited duration company for a maximum validity of 30 years.

In summary, the Cayman Islands government adopts an open policy in foreign exchange without any relevant control and restriction imposed; therefore, it has no significant impact on the Company's fund utilization. In addition, the Company has obtained a tax exemption commitment from the Cayman Islands government. According to the "Tax Concessions Law" (Revised in 1999), the law related to profits, income, gains, or appreciations is not applicable to the Company during the 20-year exemption period from the commitment date. Also, the Company's stock shares, bonds, or other debts is not subject to the levy of capital gain tax, income tax, profit tax, or incremental tax, or any amount to be withheld in accordance with the Tax Concessions Law.

In terms of laws and regulations, the laws of the Cayman Islands on protecting the rights and interests of minority shareholders are not the same as the laws and regulations in other jurisdictions, such as, the Republic of China. The Company has

the articles of incorporation amended within the laws and regulations of the Cayman Islands to protect the rights and interests of Taiwanese shareholders in accordance with the Securities and Exchange Act, the Company Act, and other laws and regulations and the requirements of the competent authorities of the Republic of China.

3. Whether the validity of the civil court judgment of the Republic of China is recognized

According to the legal opinion of the Cayman Islands, where a definitive final judgment is obtained from a Taiwanese court in an action against a person demanding payment from a company (excluding multiplied compensation for damages, taxes or other similar payments, fines, or other penalties), it is deemed as valid by the court of the Cayman Islands with a judgment made based on the said judgment of Taiwan court, provided that: (1) the Taiwan court shall have appropriate jurisdiction over the parties involved in the judgment; (2) the Taiwan court has not violated the Cayman Islands' principle of natural justice; (3) the judgment is not obtained by fraud; (4) the execution of the judgment will not violate the public policy of the Cayman Islands; (5) admissible new evidence in connection with the judgment has not been submitted before a judgment issued by the court of the Cayman Islands; and (6) the due process under the laws of the Cayman Islands has been complied with completely.

In summary, according to the laws of the Cayman Islands, the civil judgment made by the courts of the Republic of China that meets the aforesaid requirements will be recognized and enforced in the Cayman Islands, otherwise, it will be dismissed. Therefore, the risk that the civil judgment made by the court of the Republic of China will not be recognized and enforced by the court of the Cayman Islands cannot be ruled out.

## (II) Main country of operation: the United States

### 1. Changes in macroeconomy and political and economic environment

In 2022, the U.S. GDP was up 2.1%, which substantially decrease compared with the growth rate of the previous year as 5.7% mainly because of the negative growth in the first 2 quarters of 2022. Nonetheless, the consistent consumer spending and robust labor market drive the GDP to turn positive growth in the last two quarters. The quarterly analysis shows that the first quarter of the U.S. surged to the highest level since the early 1980s due to inflation while the unstable external environment caused the economy to stagnate. In spite of the soaring import brought by the increase in robust consumer demand, the trade deficit expanded, causing GDP to shrink by 1.6%, which was far lower than the 6.9% growth from the previous quarter. It was also the first negative growth since 2020. In Q2, despite the increase in consumer spending, GDP still showed a negative growth of 0.6% due to the decline in exports. Q3 GDP showed 2.6% growth due to a diminished trade deficit, a favor of consumer spending, non-residential fixed investment, and an increase in government expenditures. The Q4 GDP performed better than expected, up 2.9%, however, the consumer spending accounting for 2/3 of the economic activities was only up 2.1% while the final sales by domestic buyers were only up 0.8% in Q4, which was significantly lower than the Q3 growth of 1.5%. The GDP figures indicate that the consumer momentum supporting the U.S. economy is eventually weakening while the public faces pressure for living costs and high inflation. The Q4 GDP slowed down in growth accordingly. Overall, according to the data released by the U.S. Department of Commerce on January 26, 2023, the overall GDP for the U.S. in 2022 was up 2.1%. Looking ahead, with the Federal Reserve implementing interest rate policies to combat inflation, the US economy is expected to enter a period of low or zero growth in 2023. According to the report by the International Monetary Fund (IMF) on January 31 of this year, the GDP growth rate for the year 2023 is projected to be less than the previous year, with only a 1.4% increase. Overall, with the moderate growth of the US economy and the increasing application of 5G technology, it is expected to stimulate market demand and have a positive impact on the company's performance.

### 2. Exchange controls, taxes, and related laws and regulations

The US financial system has become a mature and complete one after years of refinement. The US monetary market is the most advanced one in the world with the most convenient platform for international financial exchanges provided. Foreign exchange control is non-existence; therefore, the Company's operations in the United States are free of any risk of foreign exchange control. In terms of laws and regulations, the Company's subsidiaries operating in the United States shall comply with the US Delaware General Corporation Law and other governing regulations. The finance of the Company's subsidiaries operated in the United States has not yet been affected by

changes in relevant laws and tax regulations. However, changes in relevant laws and regulations and tax policies in the United States may have an adverse impact on the Company in the future. In addition, the Finance Department and Administration Office of the Company are observing the changes in the relevant US laws and regulations and the political and economic environment; also, consult with professional consultants, such as, lawyers and CPAs in a timely manner to reduce the possibility of risks.

### 3. Whether the validity of the civil court judgment of the Republic of China is recognized

The court judgments of foreign countries are recognized by the courts of California in accordance with “California’s Uniform Foreign-Country Money Judgments Recognition Act (California Code of Civil Procedure Sections 1713-1724) (hereinafter referred to as the “Foreign-Country Money Judgment Recognition Act”), which took effect on January 1, 2008. The Foreign-Country Money Judgment Recognition Act is only applicable to foreign judgments that apply for recognition after January 1, 2008.

(1) In general, according to “The Foreign-Country Money Judgment Recognition Act,” a foreign judgment can be recognized when it is for a payment or a refusal of payment for a certain amount of money. Also, according to “The Foreign-Country Money Judgment Recognition Act,” the judgment must be final, conclusive, enforceable, and free of any of the following situations:

- ① A taxation-related judgment;
- ② A fine- or penalty-related judgment;
- ③ A judgment related to divorce, custody, alimony, and other kinship;
- ④ However, a judgment related to divorce, custody, alimony, and other kinship does not preclude other courts in California from recognizing such judgments under the California Code of Civil Procedure Sections 1723.

(2) The party applying for recognition must have an application filed before the time limit when the foreign judgment is still valid in the foreign country, or within 10 years from the effective date of the foreign judgment in the foreign country (whichever is earlier). Also, the applying party is responsible for providing evidence to prove the foreign judgment complying with “The Foreign-Country Money Judgment Recognition Act.” However, the California court shall not recognize the validity of the civil judgment in the following circumstances:

- ① The judicial system at where the civil judgment rendered does not provide an impartial tribunal or a due process of law equivalent to California law.
- ② The court of this judgment has no jurisdiction over the defendant and the subject of the dispute.

In addition, the California court has the right not to recognize a civil judgment in any of the following circumstances: (1) the defendant has not been notified in time by the court, thus without sufficient time to defend the case; (2) the civil judgment has



been obtained by fraudulent means, thus the losing party does not have sufficient time to defend the case; (3) the civil judgment, the claim basis, or the asserted remedy violates California or U.S. public policy; (4) the civil judgment contradicts other final and conclusive judgments ; (5) the civil court proceedings of the judgment rendered are inconsistent with the dispute resolution method agreed by the parties; (6) if the jurisdiction stipulates that service should be delivered in person, but the civil judgment court has serious forum non conveniens; (7) the integrity of the civil court that made the judgment is considerably doubtful; (8) the specific proceedings of the court that made the judgment do not meet the requirements of due process of law; (9) the judgment including compensations for restoration of reputation; unless a California court determines that the foreign court has protected freedom of speech and freedom of the press to the extent required by the California Constitutions and U.S. Constitutions.

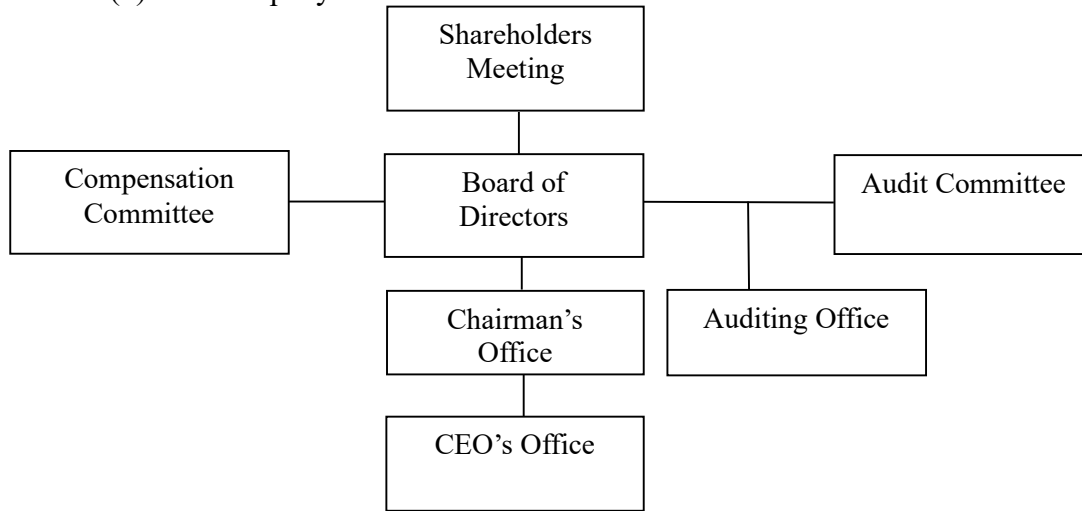
In summary, according to the laws of the United States, the civil judgment made by the courts of the Republic of China that conforms to the provisions of the “Foreign-Country Money Judgment Recognition Act” will be recognized and enforced in the California court of the United States, otherwise, it will be dismissed. Therefore, the risk that the civil judgment made by the court of the Republic of China will not be recognized and enforced by the court of the United States cannot be ruled out.

### Three. Corporate Governance Report

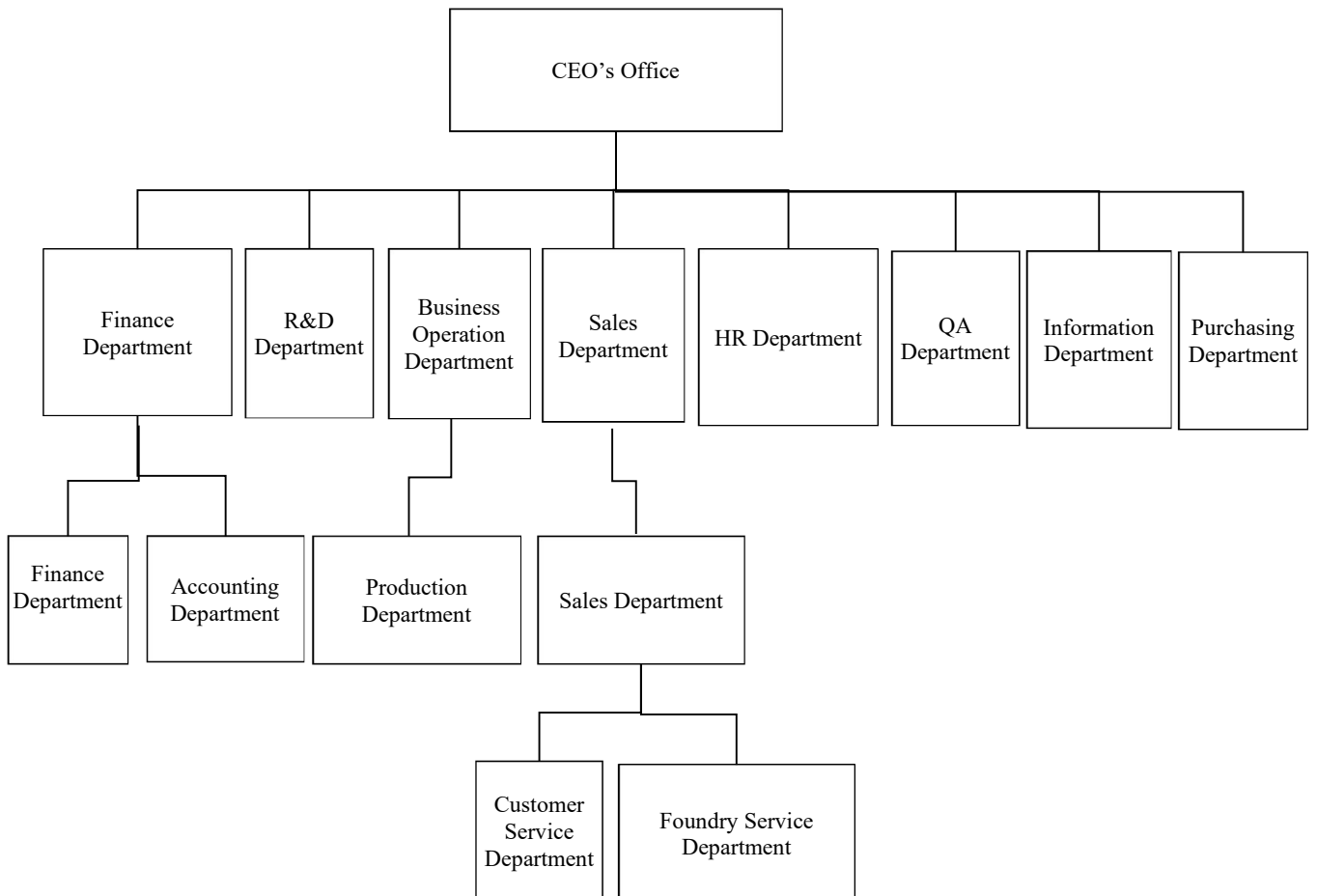
#### I. Organizational system

##### (I) Organizational structure

###### (1) The Company



###### (2) GCS, USA



(II) Departmental operations

Department	Job Responsibilities
Chairman's Office	Formulate policies and objective guidelines for the Company's business operations, and supervise the business implementation and promotion of the key managerial officers.
CEO's Office	Implement the resolutions of the board of directors and supervise the implementation and execution of the Company's various operations.
Auditing Office	Evaluate the implementation of the Company's internal control system, provide suggestions for improvement and follow up on the improvement status in a timely manner to ensure the continuous and effective implementation of the internal control system.
Finance / Accounting Department	Manage the Company's working capital and accounting and bookkeeping operations, as well as the related legal affairs, investment management, mergers and acquisitions, etc.
R&D Department	Take charge of technology development, design, product trial production, testing, verification, and related patent application and maintenance.
Business Operation Department	Take charge of the Company's production matters, product trial production, testing, and annual production plan and goals.
Sales Department	Take charge of the market information collection, product sales, customer service, market and customer development, and the maintenance of existing customers.
Human Resources (HR) Department	Take charge of the Company's recruitment, training, salary, and personnel regulations.
Quality Assurance (QA) Department	Take charge of the Company's product quality refinement and the implementation of quality control.
Information Department	Take charge of the Company's IT information management and maintenance.
Purchasing Department	Take charge of the procurement of raw materials and substances, and the management of suppliers.

II. Information on Directors, Supervisors, Presidents, Vice Presidents, Junior VPs, and officers of departments and branches

(I) Directors and Supervisors (The Company does not have supervisors)

1. Director information

April 8, 2023

Job Title	Name	Nationality or place of registration	Gender & age (Note 9)	First-term elected date	Elected date	Term of office (Years)	Number of Shares Owned When Elected		Existing Number of Shares Owned (Note 1)		Current Number of Shares Owned by Spouse or Minor Children (Note 1)		Number of shares held in the name of others (Note 1)		Main education (experience)	Currently holding positions in the Company and other companies	Whose Spouse or Second-Degree Relative Serving as a Head, Board Director, or supervisor		
							Number of Shares (shares)	Shareholding ratio	Number of Shares (shares)	Shareholding ratio (Note 2)	Number of Shares (shares)	Shareholding ratio (Note 2)	Number of Shares (Shares)	Shareholding ratio (Note 2)			Title	Name	Relation
Chairman	Huang, Ta-Lun (Note 3)	ROC	Male	11/30/2010	7/2/2021	2	-	-	-	-	3,710,886	3.33%	-	-	MBA, University of Michigan, Ann Arbor Partner of AsiaVest Partners, TCW/YFY Ltd.	Head of the Company's Strategy Development Office Representative of Corporate Director of GCS Device Technologies Co., Ltd. Director of Parade Technologies, Ltd. Director of Amulair Thermal Technology Inc.. Director of TCERA CO., LTD. Director of InnoCare Optoelectronics Corp. Director of Unikorn Semiconductor Corp. Director of Shanghai Galasemi Co., Ltd Independent Director of EGIS TECHNOLOGY INC. Independent Director of SYSTEX Corporation Independent Director of ALi Corporation	-	-	-
Director	Ann, Bau Hsing (Note 3)	ROC	Male	11/15/2012	7/2/2021	2	-	-	-	-	502,007	0.45%	-	-	MBA, Rutgers, The State University of New Jersey Master of Engineering, Ohio State University VP of Hotung International Company KTB Investment Partner and Executive Director of KTB Investments VP of Pegatron Corporation	Chief Executive Officer and President of the Company Director of D-Tech Optoelectronics, Inc. Chairman of D-TECH OPTOELECTRONICS (TAIWAN) CORPORATION Vice Chairman of Unikorn Semiconductor Corp. Vice Chairman of Changzhou Chemsemi Co., Ltd. Chairman of Changzhou Galasemi Co., Ltd Director of Shanghai Galasemi Co., Ltd	-	-	-
Corporate Director	EPISTAR Corporation (Note 4)	ROC	-	6/5/2020	6/5/2020	3	3,667,000	4.01%	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	Chairman and Director of Yenrich Technology Corporation Director of SH OPTOTECH CO., LTD. Chairman and Director of Unikorn Semiconductor Corp. Chairman and Director of GaN Force Corporation Chairman and Director of iReach Corporation Director of PlayNitride Inc.	Chairman and Director of Yenrich Technology Corporation Director of SH OPTOTECH CO., LTD. Chairman and Director of Unikorn Semiconductor Corp. Chairman and Director of GaN Force Corporation Chairman and Director of iReach Corporation Director of PlayNitride Inc. Director of TE OPTO CORPORATION	-	-	-

Job Title	Name	Nationality or place of registration	Gender & age (Note 9)	First-term elected date	Elected date	Term of office (Years)	Number of Shares Owned When Elected		Existing Number of Shares Owned (Note 1)		Current Number of Shares Owned by Spouse or Minor Children (Note 1)		Number of shares held in the name of others (Note 1)		Main education (experience)	Currently holding positions in the Company and other companies	Whose Spouse or Second-Degree Relative Serving as a Head, Board Director, or supervisor		
							Number of Shares (shares)	Shareholding ratio	Number of Shares (shares)	Shareholding ratio (Note 2)	Number of Shares (shares)	Shareholding ratio (Note 2)	Number of Shares (Shares)	Shareholding ratio (Note 2)			Title	Name	Relation
														Director of TE OPTO CORPORATION Director of CHI LIN OPTOELECTRONICS CO., LTD. Chairman and Director of Lighting Investment Corporation	Director of CHI LIN OPTOELECTRONICS CO., LTD. Chairman and Director of Lighting Investment Corporation				
	Representative: Lee, Biing Jye (Note 4)	ROC	Male	6/5/2020	6/5/2020	3	-	-	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	PhD in Chemical Engineering, National Tsing Hua University Chairman of Epistar Corporation Chairman and president of ENNOSTAR INC.	Chairman and president of ENNOSTAR INC. Representative of Corporate Director of Unikorn Semiconductor Corp. Chairman of Tyntek Corporation Chairman of Epistar JV Holding (BVI) Co., Ltd. Representative of Corporate Director of Kaistart (Xiamen) Co., Ltd. Representative of Corporate Director of FormoLight Technologies, Inc Chairman and president of GaN Force Corporation Chairman of Harvestar Investment Corp. Chairman of Calystar Investment Corp Chairman of Precistar Investment Corp. Chairman of Manastar Investment Corp	-	-	-
Corporate Director	GaNrich Semiconductor Corporation (Note 4)	ROC	-	6/5/2020	6/5/2020	3	1,000	0.001%	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	None	None	-	-	-
	Representative: Shih, Wei (Note 4)	ROC	Male	6/5/2020	6/5/2020	3	-	-	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	Master of Electrical Engineering Institute of University of Southern California Junior VP of FH Trust VP of EPISTAR Corporation President of Unikorn Semiconductor Corp.	VP of ENNOSTAR INC. Chairman and Chief Strategy Officer of Unikorn Semiconductor Corp.	-	-	-
Corporate Director	Unikorn Semiconductor Corp. (Note 5)	ROC	-	7/2/2021	7/2/2021	2	20,000	0.022%	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	None	None	-	-	-
	Representative: Lee, Biing Jye (Note 5)	ROC	Male	7/2/2021	7/2/2021	2	-	-	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	PhD in Chemical Engineering, National Tsing Hua University Chairman of Epistar Corporation Chairman and president of ENNOSTAR INC.	Chairman and president of ENNOSTAR INC. Representative of Corporate Director of Unikorn Semiconductor Corp. Chairman of Tyntek Corporation Chairman of Epistar JV Holding (BVI) Co., Ltd. Representative of Corporate Director of Kaistart (Xiamen) Co., Ltd.	-	-	-

Job Title	Name	Nationality or place of registration	Gender & age (Note 9)	First-term elected date	Elected date	Term of office (Years)	Number of Shares Owned When Elected		Existing Number of Shares Owned (Note 1)		Current Number of Shares Owned by Spouse or Minor Children (Note 1)		Number of shares held in the name of others (Note 1)		Main education (experience)	Currently holding positions in the Company and other companies	Whose Spouse or Second-Degree Relative Serving as a Head, Board Director, or supervisor		
							Number of Shares (shares)	Shareholding ratio	Number of Shares (shares)	Shareholding ratio (Note 2)	Number of Shares (shares)	Shareholding ratio (Note 2)	Number of Shares (Shares)	Shareholding ratio (Note 2)			Title	Name	Relation
															Representative of Corporate Director of FormoLight Technologies, Inc Chairman and president of GaN Force Corporation Chairman of Harvestar Investment Corp. Chairman of Calystar Investment Corp Chairman of Precistar Investment Corp. Chairman of Manastar Investment Corp				
Director	Shih, Wei (Note 6)	ROC	Male	7/2/2021	7/2/2021	2	-	-	-	-	-	-	-	Master of Electrical Engineering Institute of University of Southern California Junior VP of FH Trust VP of EPSTAR Corporation President of Unikorn Semiconductor Corp.	VP of ENNOSTAR INC. Chairman and Chief Strategy Officer of Unikorn Semiconductor Corp.	-	-	-	
Director	Lee, Biing Jye (Note 8)	ROC	Male	5/20/2022	5/20/2022	1	-	-	-	-	-	-	-	PhD in Chemical Engineering, National Tsing Hua University Chairman of Epistar Corporation Chairman and president of ENNOSTAR INC.	Chairman and president of ENNOSTAR INC. Representative of Corporate Director of Unikorn Semiconductor Corp. Chairman of Tyntek Corporation Chairman of Epistar JV Holding (BVI) Co., Ltd. Representative of Corporate Director of Kaistart (Xiamen) Co., Ltd. Representative of Corporate Director of FormoLight Technologies, Inc Chairman and president of GaN Force Corporation Chairman of Harvestar Investment Corp. Chairman of Calystar Investment Corp Chairman of Precistar Investment Corp. Chairman of Manastar Investment Corp	-	-	-	
Independent Director	Tseng, Tsung-Lin (Note 7)	ROC	Male	11/15/2012	6/5/2020	3	3,641	0.004%	-	-	-	-	-	MBA, University of Missouri at Columbia Accounting Bachelor of National Cheng Kung University CFO of Semiconductor Manufacturing International Corporation, CEO of CSP, CEO of Legend Biotech, CEO of Plasma Display Panel Co., Ltd., Chief Investment Officer of QUANTA COMPUTER INC., CFO of United Microelectronics Corporation, and CFO of Taiwan Semiconductor Manufacturing Co., Ltd.	Director of XAC Automation Corp. Independent Director of Groundhog Technologies Inc.	-	-	-	

Job Title	Name	Nationality or place of registration	Gender & age (Note 9)	First-term elected date	Elected date	Term of office (Years)	Number of Shares Owned When Elected		Existing Number of Shares Owned (Note 1)		Current Number of Shares Owned by Spouse or Minor Children (Note 1)		Number of shares held in the name of others (Note 1)		Main education (experience)	Currently holding positions in the Company and other companies	Whose Spouse or Second-Degree Relative Serving as a Head, Board Director, or supervisor		
							Number of Shares (shares)	Shareholding ratio	Number of Shares (shares)	Shareholding ratio (Note 2)	Number of Shares (shares)	Shareholding ratio (Note 2)	Number of Shares (Shares)	Shareholding ratio (Note 2)			Title	Name	Relation
Independent Director	Yang, Jung-Kung (Note 7)	ROC	Male	3/26/2012	6/5/2020	3	-	-	-	-	-	-	-	MBA, University of Missouri at Columbia Bachelor of Mechanical Engineering, National Tsing Hua University VP and Senior VP of UMC Capital Junior VP of Inve Star Capital Manager of Shanho International Corp.	TransLink Capital Co-founder and executive director of TransLink Capital Director of Parade Technologies, Ltd. Director of X2 Power Technologies Limited Director of Shenzhen Immotor Technology Co., Ltd. Director of GrandTech C.G. Systems Inc. Director of DCard Holdings Ltd. Director of Pakal Technologies, Inc. Director of Axonne, Inc. Director of UBiAi International (Cayman) Limited Representative of Corporate Director of iWEECARE Co., Ltd. Director of XConn Technologies Holdings, Ltd. Director of (U.S.A) Reed Semiconductor Corp. Taiwan Branch	-	-	-	
Independent Director	Cheng, Jian-Jong (Note 7)	ROC	Male	6/5/2020	6/5/2020	3	-	-	-	-	-	-	-	Bachelor of Electrical Engineering, National Taiwan University Master in Electrical Engineering, University of Southern California President of Pegatron Corporation VP of ASUSTEK COMPUTER INC.	Vice Chairman and Vice Strategy Officer of Pegatron Corporation Chairman of AzureWave Technologies, Inc. Chairman of Casetek Holdings Limited Chairman of FuYang Technology Corp. Representative of Corporate Director of Asus Investment Ltd. Representative of Corporate Director of Asuspower Investment Ltd. Representative of Corporate Director of Asustek Investment Ltd. Representative of Corporate Director of RI-KUAN METAL CORPORATION Director of Pegatron Czech s.r.o. Director of Pegatron USA, Inc. Director of Alcor Micro, Corp. Chairman of Pegatron Technology India Private Limited Director of Epoch Foundatio Director of AZWAVE Holdings (SAMOA) INC. Chairman of Azure Lighting Technologies, Inc.	-	-	-	

Note 1: It refers to the shareholdings as of the annual report publication date (April 8, 2023).

Note 2: It is calculated based on the total issuance of 111,310,734 shares.

Note 3: Elected on June 5, 2020 and resigned on April 28, 2021 in compliance with the legal requirements, and then elected again in the by-election on July 2, 2021.

Note 4: The corporate director was elected on June 5, 2020 and then resigned on July 1, 2021 due to the Group's internal organization adjustment.

Note 5: The corporate director was elected on July 2, 2021 and then resigned on February 24, 2022 due to the Group's internal organization adjustment.

Note 6: Elected on July 2, 2021 for a term of office from July 2, 2021 to June 4, 2023.

Note 7: Elected on June 5, 2020 for a term of office from June 5, 2020 to June 4, 2023.

Note 8: Elected on May 20, 2022 for a term of office from May 20, 2022 to June 4, 2023.

Note 9: Please refer to page 26 of this annual report for information on the age of directors.



## 2. Information on the professional qualifications of Directors, Board diversity policy, and independence

### (1) Disclosure of information on the professional qualifications of directors and supervisors and the independence of independent directors:

Conditions		Professional qualifications and experience	Independence	Number of publicly listed company that he/she serves as an Independent Director	
Title / Name					
Chairman	Huang, Ta-Lun	1. Please refer to pages 19-23 of this annual report for the professional qualifications and experience of directors. 2. All of the directors are free of any of the conditions specified in Article 30 of the Company Act (Note 1).	NA	3	
Director	Ann, Bau Hsing			0	
Director	Shih, Wei			0	
Independent Director	Yang, Jung-Kung			All independent directors meet the following conditions: 1. Comply with Article 14-2 of the Securities and Exchange Act and the relevant provisions of the "Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies" (Note 2). 2. The Company's shares are not held by the principal and the principal's spouse and minor children. 3. There had been no amount of remuneration received for providing business, legal, financial, accounting, and other services to the Company or the Company's affiliated enterprises in the last two years.	0
Independent Director	Tseng, Tsung-Lin				1
Independent Director	Cheng, Jian-Jong				0

Note 1: A person who is under any of the following circumstances shall not act as a managerial officer of a company. If he/she has been appointed as such, he/she shall certainly be discharged:

- (1) Having committed an offence as specified in the Statute for Prevention of Organizational Crimes and subsequently convicted of a crime, and has not started serving the sentence, has not completed serving the sentence, or five years have not elapsed since completion of serving the sentence, expiration of the probation, or pardon;
- (2) Having committed the offence in terms of fraud, breach of trust or misappropriation and subsequently convicted with imprisonment for a term of more than one year, and has not started serving the sentence, has not completed serving the sentence, or two years have not elapsed since completion of serving the sentence, expiration of the probation, or pardon;
- (3) Having committed the offense as specified in the Anti-corruption Act and subsequently convicted of a crime, and has not started serving the sentence, has not completed serving the sentence, or two years have not elapsed since completion of serving the sentence, expiration of the probation, or pardon;
- (4) Having been adjudicated bankrupt or adjudicated of the commencement of liquidation process by a court, and having not been reinstated to his/her rights and privileges;
- (5) Having been dishonored for unlawful use of credit instruments, and the term of such sanction has not expired yet;
- (6) Having no or only limited disposing capacity;
- (7) Having been adjudicated of the commencement of assistantship and such assistantship having not been revoked yet.

Note 2: The relevant provisions are as follows:

- (1) Not a government, juristic persons, or its representative as specified in Article 27 of the Company Act;
- (2) Serve as an independent director of no more than three other publicly listed companies.
- (3) There is not any of the following circumstances occurred during the two years before being elected or during the term of office:
  1. An employee of the company or any of its affiliates;
  2. A director or supervisor of the company or any of its affiliates.
  3. A natural-person shareholder who holds shares, together with those held by the person's spouse, minor children, or held by the person under others' names, in an aggregate of 1% or more of the total number of issued shares of the company or ranking in the top 10 in holdings;
  4. A spouse, relative within the second degree of kinship, or lineal relative within the third degree of kinship, of a managerial officer in subparagraph 1 or any of the persons in subparagraph 2 and 3;

5. A director, supervisor, or employee of a corporate shareholder that directly holds 5% or more of the total number of issued shares of the company, or that ranks among the top five in shareholdings, or that designates its representative to serve as a director or supervisor of the company under Article 27, Paragraph 1 or 2 of the Company Act;
6. If a majority of the company's director seats or voting shares and those of any other company are controlled by the same person: a director, supervisor, or employee of that other company;
7. If the Chairperson, President, or person holding an equivalent position of the company and a person in any of those positions at another company or institution are the same person or are spouses: a director (or executive), supervisor, or employee of that other company or institution.
8. A director (executive), supervisor (supervisor), managerial officer, 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.
9. A professional individual who, or an owner, partner, director (executive), supervisor, or officer of a sole proprietorship, partnership, company, or institution that, provides auditing services to the company or any affiliate of the company, or that provides commercial, legal, financial, accounting, or related services to the company or any affiliate of the company for which the provider in the last 2 years has received cumulative compensation exceeding NT\$500,000, or a spouse thereof; provided, this restriction does not apply to a member of the Remuneration Committee, public tender offer review committee, or special committee for merger/consolidation and acquisition, who exercises powers pursuant to the Act or to the Business Mergers and Acquisitions Act or related laws or regulations.

Note 3: The director information is based on the list of incumbent directors as of the annual report publication date.

## (2) Board diversity and independence

- A. Board Diversity: The members of our company's board of directors are selected based on considerations of independence and diverse capabilities, including diverse backgrounds in industries, academia, or professions. The specific management objectives and achievements of our company's diversity policy are as follows:

Management objectives	Achievement
Less than one-thirds of the Board Directors serving as the managerial officers of the company	Achieved
The number of independent directors exceeds one-thirds of the board directors	Achieved
The directors possess diverse professional capabilities, and the overall competencies that the board of directors should have are as follows:: (1) Legal, accounting, or finance profession; (2) Business management ability; (3) Industry experience; (4) Science and technology profession	Achieved

## Implementation of the Board Diversity Policy:

Name	Title	Personal profile					Professional ability				
		Nationality	Sex	Serving as an employee too	Age		Term of office for independent director (not more than 3 terms consecutively)	Legal, accounting, or finance profession	Business management ability	Industry experience	Science and technology profession
					51-60	61-70					
Huang, Ta-Lun	Chairman	ROC	Male	V	V		NA	V	V	V	V
Ann, Bau Hsing	Director		Male	V		V		V	V	V	V
Lee, Biing Jye	Director		Male			V		V	V	V	V
Shih, Wei	Director		Male		V			V	V	V	V
Tseng, Tsung-Lin	Independent Director		Male			V	V	V	V		
Yang, Jung-Kung	Independent Director		Male		V			V	V	V	
Cheng, Jian-Jong	Independent Director		Male			V	V	V	V	V	

### B. Board Independence:

The independence of the Company's Board of Directors as of the annual report publication date is as follows:

- a. There are 7 members in the Company's board of directors, including 3 independent directors that accounted for 43% of the board of directors.
- b. All of the board directors are citizens of the Republic of China.
- c. Except for Mr. Huang, Ta-Lun and Mr. Ann, Bau Hsing who are concurrently employees of the Company, all other board directors are not holding any position within the Company. The number of board directors who also serve as an employee of the Company accounts for 29% of the board directors.
- d. One of the independent directors has not served for 3 consecutive terms.
- e. There is not a spouse or a relative within the second degree of kinship between the board directors.

In summary, the Company's Board of Directors is independent.

(II) Information on the President, Vice President, Junior VP, and Head of Departments or Branches

March 31, 2022

Title	Nationality	Name	Gender	Service date	Number of Shares Owned (Note 1)		Number of Shares Owned by Spouse and Minor Child (Note 1)		Number of shares held in the name of others (Note 1)		Experience and Education Background	Concurrent Job Title Held in Other companies	Manager Who is a Spouse or has the Second-degree Kinship		
					Number of shares (shares)	Shareholding ratio (Note 2)	Number of shares	Shareholding ratio	Number of shares	Shareholding ratio			Title	Name	Relation
Chairman and Head of Strategic Development Office	ROC	Huang, Ta-Lun	Male	8/1/2015	-	-	3,710,886	3.33%	-	-	MBA, University of Michigan, Ann Arbor Partner of AsiaVest Partners, TCW/YFY Ltd.	Representative of Corporate Director of GCS Device Technologies Co., Ltd. Director of Parade Technologies, Ltd. Director of Amulair Thermal Technology Inc.. Director of TCERA CO., LTD. Director of InnoCare Optoelectronics Corp. Director of Unikorn Semiconductor Corp. Director of Shanghai Galasemi Co., Ltd Independent Director of EGIS TECHNOLOGY INC. Independent Director of SYSTEX Corporation Independent Director of ALi Corporation	-	-	-
Chief Executive Officer & President	ROC	Ann, Bau Hsing	Male	3/1/2012	-	-	502,007	0.45%	-	-	MBA, Rutgers, The State University of New Jersey Master of Engineering, Ohio State University VP of Hotung International Company KTB Investments Partner and Executive Director of KTB Investments VP of Pegatron Corporation	Director of D-Tech Optoelectronics, Inc. Chairman of D-TECH OPTOELECTRONICS (TAIWAN) CORPORATION Vice Chairman of Unikorn Semiconductor Corp. Vice Chairman of Changzhou Chemsemi Co., Ltd. Chairman of Changzhou Galasemi Co., Ltd Director of Shanghai Galasemi Co., Ltd	-	-	-
Senior VP of R&D Unit	USA	Wang, Shing-Kuo	Male	12/18/2000	230,876	0.21%	-	-	-	-	Postdoctoral Researcher in Electrical Engineering at Carnegie Mellon University PhD in Physics, Carnegie Mellon University Department of Physics, National Taiwan University Director of TRW Electronics System Group's Advanced Microelectronics	-	-	-	
VP of Operating Unit	ROC	Chen, Minkar	Male	8/2/2013	142,536	0.13%	-	-	-	-	Master of Materials Department, National Chiao Tung University Foundry Manager of HEXAWAVE INC. Engineering Manager of WIN SEMICONDUCTORS CORP.	-	-	-	

Title	Nationality	Name	Gender	Service date	Number of Shares Owned (Note 1)		Number of Shares Owned by Spouse and Minor Child (Note 1)		Number of shares held in the name of others (Note 1)		Experience and Education Background	Concurrent Job Title Held in Other companies	Manager Who is a Spouse or has the Second-degree Kinship		
					Number of shares (shares)	Shareholding ratio (Note 2)	Number of shares	Shareholding ratio	Number of shares	Shareholding ratio			Title	Name	Relation
Senior VP of Optoelectronic Products of Business Unit	ROC	Yu, Yeou-Chong	Male	10/1/2004	289,887	0.26%	-	-	-	-	Master of Engineering, Case Western Reserve University Sales VP of WIN SEMICONDUCTORS CORP. Sales Director of N. America Region of United Microelectronics Corporation Senior Manager of Cirrus Logic, Inc.	President of GCS Device Technologies Co., Ltd.	-	-	-
VP of Finance/Accounting Unit	USA	Mark L. Raggio	Male	7/28/2004	460,918	0.41%	-	-	-	-	Bachelor of Business Management and Accounting, University of Louisiana at Lafayette Assistant Manager of Accounting Department, Exxon Mobil USA	-	-	-	
Senior VP of Optoelectronic Devices, R&D Unit	ROC	Wang, Samuel	Male	7/15/2000	16,898	0.02%	-	-	-	-	Ph.D. in Engineering, Northwestern University Senior engineer of GE Aerospace Manager of Lockheed Martin Corporation	-	-	-	
Senior VP of RF Devices of Business Unit	USA	Yau, Wing	Male	11/30/1998	309,231	0.28%	-	-	-	-	Master of Engineering, University of Southern California Planning manager of Raytheon Systems, Co.	-	-	-	
Corporate Governance Officer	ROC	Lin, Shu-Wei	Female	2/20/2023	23,712	0.02%	-	-	-	-	Master of Financial Risk Management, University of Illinois at Chicago Audit Manager, of AU Optronics Corp.	-	-	-	

Note 1: It refers to the shareholdings as of the annual report publication date (April 8, 2023).

Note 2: It is calculated based on the total issuance of 111,310,734 shares.

Note 3: As of the annual report publication date, the person mentioned is currently in service.

### III. Remuneration for Directors, Supervisors, President, and Vice Presidents in the most recent year

#### (I) Remuneration of directors and independent directors

Unit: NT\$ Thousands; %

Title	Name	Director's Remuneration								Ratio of the total amount (A+ B+ C+D) to the net income (loss)		Remuneration to part-time employees						Ratio of the total amount (A+ B+ C+D+E+F+G) to the net income (loss)		Remuneration received from reinvested business other than the subsidiaries or parent company		
		Remuneration (A)		Pension (B)		Director's remuneration (C) (Note 1)		Business execution expense (D) (Note 1)				Salary, bonus, special expenses, etc. (E) (Note 2)		Pension (F)		Employee remuneration (G)						
		The Company	All companies in the financial report	The Company	All companies in the financial report	The Company	All companies in the financial report	The Company	All companies in the financial report	The Company	All companies in the financial report	The Company	All companies in the financial report	The Company	All companies in the financial report	Cash amount	Stock amount	Cash amount	Stock amount		The Company	All companies in the financial report
Chairman	Huang, Ta-Lun	-	-	-	-	-	-	-	\$209	-	\$209 (0.02%)	-	\$4,238	-	-	-	-	-	-	-	\$4,447 (0.47%)	None
Director	Ann, Bau Hsing	-	-	-	-	-	-	-	-	-	-	-	\$14,362	-	\$364	-	-	-	-	-	\$14,726 (1.57%)	None
Corporate Director	Unikom Semiconductor Corp. (Note 3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	None
Representative of Corporate Director	Lee, Biing Jye (Note 3)	-	-	-	-	-	-	-	\$60	-	\$60 (0.01%)	-	-	-	-	-	-	-	-	-	\$60 (0.01%)	None
Director	Shih, Wei	-	-	-	-	-	-	-	\$209	-	\$209 (0.02%)	-	-	-	-	-	-	-	-	-	\$209 (0.02%)	\$1,423
Director	Lee, Biing Jye (Note 4)	-	-	-	-	-	-	-	\$60	-	\$60 (0.01%)	-	-	-	-	-	-	-	-	-	\$60 (0.01%)	None
Independent Director	Tseng, Tsung-Lin	-	-	-	-	-	-	-	\$447	-	\$447 (0.05%)	-	-	-	-	-	-	-	-	-	\$447 (0.05%)	None
Independent Director	Yang, Jung-Kung	-	-	-	-	-	-	-	\$447	-	\$447 (0.05%)	-	-	-	-	-	-	-	-	-	\$447 (0.05%)	None
Independent Director	Cheng, Jian-Jong	-	-	-	-	-	-	-	\$447	-	\$447 (0.05%)	-	-	-	-	-	-	-	-	-	\$447 (0.05%)	None

(Note 1): Directors collected only travel allowance in 2021 and nothing else. The Company suffered a net loss before tax in 2022; therefore, director remuneration was not appropriated in accordance with the Company's articles of incorporation.

(Note 2): It included salary expenses of NT\$632 recognized pursuant to IFRS 2 share-based payment (new restricted employee shares and employee stock warrants).

(Note 3): Elected on July 2, 2021 and resigned on February 24, 2022 due to the Group's internal organization adjustment.

(Note 4): Elected in the by-election on May 2, 2022.

(Note 5): Please describe the remuneration policy, system, standard, and structure of the independent directors, and describe the correlation between the remuneration amount and the responsibilities, risks, time invested, and other factors: Independent directors are members of the Audit Committee, and when the remuneration of directors is distributed, taking into account their responsibilities, the degree of participation in the Company's operations and the value of their contributions, risk taking and time invested, and determining reasonable remuneration by referring to the payment standards of other companies in this industry.

(Note 6): Except for the aforementioned disclosure, the remuneration received by the Company's board of directors in the most recent year for service provided (such as, serving as a consultant instead of an employee of the parent company / all companies listed in the financial report / invested enterprises, etc.): None

(II) Remuneration paid to supervisors in the most recent year: The Company has no supervisor appointed; therefore, it is not applicable.

(III) Remuneration paid to the President and Vice President in the most recent year

Unit: NT\$ Thousands

Title	Name (Note 1)	Salary (A) (Note 3)		Pension (B)		Bonuses, special expenses, etc. (C)		Employee remuneration (D) (Note 2)				Ratio of the total amount (A+ B+ C+D) to the net income (loss)		Remuneration received from reinvested business other than the subsidiaries or parent company
		The Company	All companies in the financial report (Note 3)	The Company	All companies in the financial report	The Company	All companies in the financial report	The Company		All companies in the financial report		The Company	All companies in the financial report	
								Cash amount	Stock amount	Cash amount	Stock amount			
Chief Executive Officer & President	Ann, Bau Hsing (Note 4)	-	\$11,829	-	\$364	-	\$2,533	-	-	-	-	-	\$14,726 (1.57%)	None
Senior VP of R&D Unit	Wang, Shing-Kuo (Note 4)	-	\$8,598	-	\$350	-	\$1,240	-	-	-	-	-	\$10,188 (1.08%)	None
Senior VP of Sales	Yau, Wing (Note 4)	-	\$7,964	-	\$294	-	\$1,100	-	-	-	-	-	\$9,358 (1%)	None
Senior VP of Sales	Yu, Yeou-Chong (Note 4)	-	\$7,950	-	\$275	-	\$501	-	-	-	-	-	\$8,726 (0.93%)	None
Senior VP of Operating Unit	Chen, Minkar (Note 4)	-	\$7,680	-	\$292	-	\$963	-	-	-	-	-	\$8,935 (0.95%)	None
Chairman and Head of Strategic Development Office	Huang, Ta-Lun	-	\$16,888	-	\$566	-	\$3,368	-	-	-	-	-	\$20,822 (2.22%)	None
VP of R&D Unit	Wang, Samuel													
VP of Finance/Accounting Unit	Mark L. Raggio													

Note 1: The information on the remuneration of the Company's managerial officers as of the end of 2022 is filled in the table.

Note 2: The Company's board of directors resolved not to distribute remuneration to employee on February 20, 2023.

Note 3: It included salary expenses of NT\$7,211,000 recognized pursuant to IFRS 2 share-based payment (new restricted employee shares and employee stock warrants).

Note 4: It refers to the top five executives with the highest remuneration received.

Remuneration Bracket

Remuneration bracket for the payment made to each President and Vice President of the Company	Name of President and Vice President	
	The Company	All companies in the financial report
Less than NT\$1,000,000	-	-
NT\$1,000,000 (inclusive)~NT\$2,000,000 (non-inclusive)	-	-
NT\$2,000,000 (inclusive)~NT\$3,500,000 (non-inclusive)	-	-
NT\$3,500,000 (inclusive)~NT\$5,000,000 (non-inclusive)	-	Huang, Ta-Lun
NT\$5,000,000 (inclusive)~NT\$10,000,000 (non-inclusive)	-	Wang, Samuel, Yu, Yeou-Chong, Yau, Wing, Chen, Minkar, and Mark L. Raggio
NT\$10,000,000 (inclusive)~NT\$15,000,000 (non-inclusive)	-	Ann, Bau Hsing and Wang, Shing-Kuo
NT\$15,000,000 (inclusive)~NT\$30,000,000 (non-inclusive)	-	-
NT\$30,000,000 (inclusive)~NT\$50,000,000 (non-inclusive)	-	-
NT\$50,000,000 (inclusive)~NT\$100,000,000 (non-inclusive)	-	-
Over NT\$100,000,000	-	-
Total	-	8 persons



- (IV) Name of the managerial officers who received employee remuneration and the distribution situation: Not applicable
- (V) Compare and explain the analysis of the total remuneration paid to the Directors, Supervisors, Presidents, and Vice Presidents of the Company and all the companies in the consolidated financial report in the last two years as a percentage of the net income on the standalone or individual financial reports; also, explain the remuneration policy, standard and combination, procedures for determining remuneration, and correlation with business performance and future risks:
1. Analysis of the remuneration paid to Directors, Supervisors, Presidents, and Vice Presidents in the last two years

Unit: NT\$ Thousands

Item	2021		2022	
	Amount	%	Amount	%
Director	\$71,235	(19)	\$74,634	(8)
President & Vice President				
Net loss	(\$378,497)	100	(939,717)	100

2. The policies, standards and combinations of remuneration payments, the procedures for determining remuneration, and their correlation with business performance and future risks

According to the Company's articles of incorporation, the remuneration of directors shall be determined by the Board of Directors by referring to the recommendations of the Remuneration Committee and the standards of other companies in this industry, which shall be paid regardless of a profit or loss resulted. Directors may request reimbursement for travel expenses, lodging expenses, and other expenses reasonably incurred for attending the Board meetings and other committee meetings designated by the Board of Directors, the Company's shareholders meetings, or performing the Company's business or the general duties of directors. Directors are entitled to the distribution of the Company's profits in accordance with the Company Act of the Cayman Islands, the regulations of public companies, service agreements, or other similar contracts signed with the Company.

The remuneration of Directors, Presidents, and Vice Presidents is based on their responsibilities assumed within the Company, the degree of participation in the Company's operations and the value of their contributions, as well as the achievement rate of overall operational goals and individual performance. The remuneration of the Company's Directors, Presidents, and Vice Presidents shall be handled in accordance

with the recommendations of the Remuneration Committee and the resolutions of the Board of Directors.

#### IV. Implementation of corporate governance

##### (I) Information on the operation of the Board of Directors

The Board of Directors had held 7 meetings (A) in 2022 with the attendance of directors illustrated as follows:

Job Title	Name	Frequency of attendance (B)	Frequency of attendance by proxy	Actual attendance rate (%) (B/A) (Note)	Remarks
Chairman	Huang, Ta-Lun	7	0	100%	Elected on June 5, 2020 and resigned on April 28, 2021 in compliance with the legal requirements, and then elected in the by-election on July 2, 2021.
Director	Ann, Bau Hsing	7	0	100%	Elected on June 5, 2020 and resigned on April 28, 2021 in compliance with the legal requirements, and then elected in the by-election on July 2, 2021.
Representative of Corporate Director	Unikorn Semiconductor Corp. Lee, Biing Jye	2	0	100%	Resigned on February 24, 2022 due to the Group's internal organization adjustment.
Director	Shih, Wei	7	0	100%	Elected in the by-election on July 2, 2021.
Director	Lee, Biing Jye	2	0	100%	Elected in the by-election on May 20, 2022. Attend the board meeting in person throughout the term of office.
Independent Director	Yang, Jung-Kung	7	0	100%	Re-elected on June 5, 2020.
Independent Director	Tseng, Tsung-Lin	7	0	100%	Re-elected on June 5, 2020.
Independent Director	Cheng, Jian-Jong	7	0	100%	Elected on June 5, 2020.

Other matters to be recorded:

I. The date, term, proposal contents of the board meeting, the opinions of all independent directors, and the Company's handling of the independent directors' opinions must be detailed in any of the following circumstances:

(I) Matters stated in Article 14-3 of the Securities and Exchange Act: Article 14-3 are not applicable since the Company has already established an Audit Committee. Please refer to the Operation of the Audit Committee (p. 36-39) for the matters listed in Article 14-5 of the Securities and Exchange Act.

(II) In addition to the aforementioned matters, other matters resolved by the Board of Directors with the dissent or reservation of the independent directors recorded or documented in writing: None

II. The name, proposal contents, the reason for recusal, and the participating in voting of the director who has a conflict of interest in the proposal concerned must be detailed:

Board meeting date	Name of Director	Proposal content	Reasons for recusal, and the participation in voting of the director
<u>February 23, 2022</u>	Ann, Bau Hsing	Proposal for the remuneration of the Company's managerial officers	1 director (including 0 director by proxy) was recused due to a conflict of interest in this proposal without participating in the discussion and voting. The proposal was resolved by the 6 directors present who did not have a conflict of interest.
<u>November 1, 2022</u>	Lee, Biing Jye and Shih, Wei	Proposal for participation in the cash capital increase of Unikorn Semiconductor Corp.	2 directors (including 0 director by proxy) were recused due to a conflict of interest in this proposal without participating in the discussion and voting. The proposal was resolved by the 5 directors present who did not have a conflict of interest.
<u>November 1, 2022</u>	Ann, Bau Hsing	Proposal for the remuneration of the Company's managerial officers	1 director (including 0 director by proxy) was recused due to a conflict of interest in this proposal without participating in the discussion and voting. The proposal was resolved by the 6 directors present who did not have a conflict of interest.

III. The performance evaluation of the Company's board of directors: The 2022 performance evaluation of the Board of Directors was completed in accordance with the "Rules for Performance Evaluation of Board of Directors;" also, the performance evaluation results were reported to the Board of Directors on February 20, 2023.

Evaluation cycle	Evaluation period	Evaluation scope	Evaluation approach	Evaluation contents
Once a year	1/1/2022 ~ 12/31/2022	Board of Directors	Internal evaluation of the Board of Directors	<p>This evaluation includes five aspects (A. Participation in the company's operations, B. Improvement of the quality of the board of directors' decision-making, C. Composition and structure of the board of directors, D. Election and continuing education of the directors, and E. Internal control), a total of 44 indicators.</p> <p>The average score of each aspect of the evaluation is between 4.42 and 5 points. The overall operation of the board of directors is satisfactory and meets the requirements of corporate governance. In addition, directors are suggested to participate in diversified professional advanced courses in response to regulatory revisions and industry changes. The company will continue to collect and provide relevant course information for directors' reference to improve their professionalism and complying with regulatory requirements.</p>
Once a year	1/1/2022 ~ 12/31/2022	Each board director	Self-evaluation of each board director	<p>This evaluation includes six aspects (A. Alignment of the goals and missions of the company, B. Awareness of the duties of a director, C. Participation in the operation of the company, D. Management of internal relationship and communication, E. The director's professionalism and continuing education, and F. Internal control), a total of 23 indicators.</p> <p>The average score in each aspect of the evaluation is between 4.48 and 4.86, indicating that all directors had positive comments on evaluating their participation in the board of directors and the efficiency and effectiveness of various operational indicators.</p>

IV. Evaluating the objectives (such as, setting up an Audit Committee, improving information transparency, etc.) and implementation of enhancing the functions of the board of directors in the current year and the most recent year: The Company has three independent directors, an Audit Committee, and a Remuneration Committee in service. Currently, the functions of the board of directors are sound. The Company will have the functions of the board of directors enhanced and the transparency of information improved in accordance with the governing laws and regulations.

V. The attendance of independent directors at each board meeting in 2022 is as follows:

✓: Attended in person ○:Attended by proxy ✕:Absence

2022	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>
Tseng, Tsung-Lin	✓	✓	✓	✓	✓	✓	✓
Yang, Jung-Kung	✓	✓	✓	✓	✓	✓	✓
Cheng, Jian-Jong	✓	✓	✓	✓	✓	✓	✓

Notes:

- (1) The resignation date of a board director who resigned before the end of the fiscal year should be indicated in the “Remark” column. The actual attendance rate (%) shall be calculated based on the number of board meetings convened during the office term of the resigned director and the actual number of board meeting attended by the resigned director.
- (2) If there is a director re-election convened before the end of the fiscal year, the name of the new and old directors and supervisors shall be filled in with the information of newly elected directors, incumbent directors, re-elected directors, and the re-election date indicated in the “Remark” column. The actual attendance rate (%) shall be calculated based on the number of board meetings convened during the office term of the resigned director and the actual number of board meeting attended by the resigned director.

(II) Operations of the Audit Committee

1. Summary of annual work priorities of the Audit Committee:

The Company’s Audit Committee consists of 3 independent directors.

The following matters were reviewed by the Audit Committee in 2022:

- (1) Financial report review
- (2) Articles of Incorporation and related company operating procedures
- (3) Important Accounting Policies and Procedures
- (4) The effectiveness of the internal control system evaluation
- (5) Significant asset transactions
- (6) Significant loaning of funds and endorsement/guarantee transactions
- (7) Offering, issuing, or private placement of equity securities
- (8) CPA independence evaluation
- (9) CPA appointment, dismissal, or resignation

● Financial report review

The board of directors prepared the Company’s 2022 business report, consolidated financial statements, and deficit compensation proposal, among which, the consolidated financial statements were audited by PricewaterhouseCoopers Taiwan (PwC Taiwan) with an audit report issued. The aforementioned business report, financial statement, and deficit compensation proposal were reviewed by the Audit Committee with a review report issued.

● Evaluating the effectiveness of the internal control system

The Audit Committee has evaluated the effectiveness of the internal control system in accordance with the regulations. The audit officer, independent auditor, and management have reported to the Audit Committee on a regular basis.

● Independence and competence of independent auditors

In order to ensure the independence of the appointed CPA firm, the Company has formulated an independence evaluation form by referring to Article 47 of the “Certified Public Accountant Act” and the Bulletin on the Code of Professional Ethics for CPAs No. 10 “Integrity, Fairness, Objectivity, and Independence” to evaluate the independence, professionalism, and competence of the CPAs. The CPA’s independent statement is obtained every year. The independence of the CPAs was confirmed and then reported in the Audit Committee meeting and the board meeting on February 23, 2022 and February 20, 2023.

2. The Company had a total of 6 (A) Audit Committee meeting held in 2022 with the attendance of the independent directors as follows:

Job title	Name	Actual attendance (B)	Attendance by proxy	Actual attendance rate (%) (B/A)	Remarks
Convener & Independent Director	Tseng, Tsung-Lin	6	0	100%	Re-elected on June 5, 2020
Independent Director	Yang, Jung-Kung	6	0	100%	Re-elected on June 5, 2020
Independent Director	Cheng, Jian-Jong	6	0	100%	Elected on June 5, 2020

Other matters to be recorded:

I. The date, term, and proposal contents of the Audit Committee meeting, the dissent or reservation and major recommendations of the independent directors, the resolutions of the Audit Committee, and the Company’s handling of the independent directors’ opinions must be detailed in any of the following circumstances:

(I) For matters listed in Article 14-5 of the Securities and Exchange Act, please refer to the important resolutions of the Shareholders Meeting and the Board Meetings in “Three. Corporate Governance Report” of this Annual Report (pages 50-54): The said important resolutions were with the approval of more than one-half of all the Audit Committee members before having them submitted to the board of directors for resolutions. The event that the said important resolutions not approved by the Audit Committee members but resolved with the consent of more than two-thirds of all directors did not occur.

(II) Except for the aforementioned matters in the preceding paragraph, the proposals without the approval of the Audit Committee members but resolved with the consent of more than two-thirds of all directors: None

II. The name, proposal contents, and the reason for recusal, and the participation in voting of the independent directors who have a conflict of interest in the proposal concerned must be detailed: None

III. Communication between independent directors and internal audit officer and CPAs (such as, the matters, methods, and results of communication on the company’s finance, business status, etc.):

(1) The Company’s internal audit officer reports the auditing operation to the Audit Committee on a quarterly basis. The summary of all communications conducted in 2022 is as follows:

Date	Nature and Communication Content	Independent directors’ recommendations and implementation results
Audit Committee meeting on February 23, 2022	1. The 2021Q4 Internal audit report 2. The 2021Q3 Internal audit follow-up report 3. The 2021 Internal Control Statement	1. Independent directors had no comments and no recommendations.

		<ol style="list-style-type: none"> <li>2. Independent directors had no comments and no recommendations.</li> <li>3. The resolutions were reported to the board of directors.</li> </ol>
Audit Committee meeting on May 3, 2022	<ol style="list-style-type: none"> <li>1. The 2022Q1 Internal audit report</li> </ol>	<ol style="list-style-type: none"> <li>1. Independent directors had no comments and no recommendations.</li> </ol>
Audit Committee meeting on August 2, 2022	<ol style="list-style-type: none"> <li>1. The 2022Q2 Internal audit report</li> </ol>	<ol style="list-style-type: none"> <li>1. Independent directors had no comments and no recommendations.</li> </ol>
Audit Committee meeting on November 1, 2022	<ol style="list-style-type: none"> <li>1. The 2022Q3 Internal audit report</li> <li>2. The 2022Q2 Internal audit follow-up report</li> <li>3. The 2023 Audit Plan</li> </ol>	<ol style="list-style-type: none"> <li>1. Independent directors had no comments and no recommendations.</li> <li>2. Independent directors had no comments and no recommendations.</li> <li>3. The resolutions were reported to the board of directors.</li> </ol>

(2) The Audit Committee communicates with the CPAs the quarterly financial statement review or audit results and other matters required by relevant laws and regulations and reviews the independence of CPAs. The communications conducted in 2022 is summarized as follows:

Date	Nature and Communication Content	Independent directors' recommendations and implementation results
Audit Committee meeting on February 23, 2022	<ol style="list-style-type: none"> <li>1. CPA's independent evaluation</li> <li>2. The 2021 consolidated financial report audit results</li> <li>3. Matters communicated with the governance unit</li> </ol>	<ol style="list-style-type: none"> <li>1. Independent directors had no comments and no recommendations.</li> <li>2. The resolutions were reported to the board of directors.</li> <li>3. Independent directors had no comments and no recommendations.</li> </ol>
Audit Committee meeting on May 3, 2022	<ol style="list-style-type: none"> <li>1. The 2022Q1 consolidated financial report review results</li> <li>2. Matters communicated with the governance unit</li> </ol>	<ol style="list-style-type: none"> <li>1. Independent directors had no comments and no recommendations.</li> <li>2. Independent directors had no comments and no recommendations.</li> </ol>
Audit Committee meeting on August 2, 2022	<ol style="list-style-type: none"> <li>1. The 2022Q2 consolidated financial report audit results</li> <li>2. Matters communicated with the governance unit</li> <li>3. Approval of change and appointment of CPA</li> </ol>	<ol style="list-style-type: none"> <li>1. The resolutions were reported to the board of directors.</li> <li>2. Independent directors had no comments and no recommendations.</li> <li>3. The resolutions were reported to the board of directors.</li> </ol>
Audit Committee meeting on November 1, 2022	<ol style="list-style-type: none"> <li>1. The 2022Q3 consolidated financial report audit results</li> <li>2. Matters communicated with the governance unit</li> </ol>	<ol style="list-style-type: none"> <li>1. Independent directors had no comments and no recommendations.</li> <li>2. Independent directors had no comments and no recommendations.</li> </ol>

(3) The Company regularly convenes the Audit Committee meeting and invites CPAs, audit officers, and relevant supervisors to attend in a non-voting capacity. A meeting can be convened at any time upon the occurrence of nonconformities.

Notes:

- (1) The resignation date of an independent director who resigned before the end of the fiscal year should be indicated in the “Remark” column. The actual attendance rate (%) shall be calculated based on the number of Audit Committee meetings convened during the office term of the resigned independent director and the actual number of Audit Committee meetings attended by the resigned independent director.
- (2) If there is an independent director re-election convened before the end of the fiscal year, the name of the new and old independent directors shall be filled in with the information of newly elected independent directors, incumbent independent directors, re-elected independent directors, and the re-election date indicated in the “Remark” column. The actual attendance rate (%) shall be calculated based on the number of Audit Committee meetings convened during the office term of such independent directors and the actual number of Audit Committee meetings attended by such independent directors.

(III) The operation of corporate governance and its differences from the “Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies” and the reasons

Evaluation Item	Operations		Difference from the “Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies” and the reasons	
	YES	No		Summary Description
I. Does the company formulate and disclose its Corporate Governance Best Practice Principles in accordance with the “Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies?”		V	The Company has incorporated the spirit of corporate governance into the internal control system and various regulations, and substantially implemented the relevant norms of corporate governance. The Company will enhance information transparency, the functions of the Board of Directors, the Audit Committee, and the Remuneration Committee, etc. to promote the operation of corporate governance in the future in accordance with the Company’s operational needs and the provisions of the “Corporate Governance Best Practice Principle for TWSE/TPEX Listed Companies.”	The Company has not yet formulated and disclosed the Corporate Governance Best Practice Principle, but has the spirit of corporate governance incorporated into the internal control system and various regulations, which can help substantially implement the relevant norms of corporate governance without any significant differences occurred.
II. The company’s shareholding structure and shareholders’ equity (I) Has the company established internal operating procedures for handling shareholders’ proposals, inquiries, disputes, and litigation matters, and then has them processed in accordance with the procedures?		V	The Company has the spokespersons and acting spokespersons appointed, and has full-time stock affairs personnel in place to deal with relevant issues of shareholders. A legal issue is to be handled with the assistance of the Company’s lawyers. The relevant operating procedures will be formulated according to the actual operational needs of the Company in the future.	The Company’s internal operating procedures are sufficient to help handle shareholders’ suggestions, doubts, disputes, and litigation matters without significant differences resulted.
(II) Does the company have a list of the major shareholders who actually control the company and the ultimate controllers of the major shareholders?	V		The Company has full knowledge of the shareholdings of directors, managerial officers, and major shareholders.	No significant difference occurred.
(III) Does the company establish and implement risk control and firewall mechanisms with affiliated companies?	V		The Company has established relevant controls in the Company’s internal control system and related party management approach in accordance with the governing laws and regulations.	No significant difference occurred.
(IV) Does the company formulate internal regulations to prohibit insiders from using undisclosed information to buy and sell securities?	V		The Company has formulated the “Operational Procedures for Preventing Insider Trading” to prohibit insiders from using undisclosed information to buy and sell securities.	No significant difference occurred.



Evaluation Item	Operations			Difference from the “Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies” and the reasons
	YES	No	Summary Description	
III. Composition and responsibilities of the Board of Directors (I) Does the board of directors formulate diversity policies, specific management objectives, and have them implemented?	V		Please see notes on pages 24-26 of this annual report.	No significant difference occurred.
(II) Is the company willing to set up other functional committees in addition to the Remuneration Committee and the Audit Committee?		V	There is not any functional committee organized by the Company except for the Remuneration Committee and the Audit Committee.	The Company will set up other functional committees as needed in the future.
(III) Does the company formulate the “Regulations Governing Self-Evaluation or Peer Evaluation of the Board of Directors,” conduct a performance evaluation annually and regularly, report the performance evaluation results to the board of directors, and apply it as a reference for determining the director’s remuneration and nomination of directors for another term?	V		The Company has formulated the “Regulations Governing Self-Evaluation or Peer Evaluation of the Board of Directors,” and conducted performance evaluation in accordance with the content of the Regulations. Please refer to page 35 of this annual report for the results of the performance evaluation of the Board of Directors in 2022.	No significant difference occurred.
(IV) Does the company regularly evaluate the independence of the independent auditors?	V		The Company evaluates the independence of CPAs at least once a year, which is carried out by the Company’s responsible unit depending on the operation and reputation of the CPA firm, the years of providing auditing services continuously, and the items specified in the “Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies.” An independent statement is obtained from the CPA firm annually. The evaluation results were reported to the Audit Committee and the Board of Directors on February 23, 2022 and February 20, 2023, respectively, in the most recent year and as of the annual report publication date.	No significant difference occurred.
IV. Does the TWSE/TPEX listed company have sufficient number of competent and appropriate corporate governance personnel and a corporate governance supervisor appointed to be responsible for corporate governance-related affairs (including but not limited to providing directors and supervisors with the information necessary for business operation, assisting directors and supervisors in complying with law and regulations, handling matters related to the board meetings and shareholders meetings lawfully, preparing the minutes of board meeting and shareholders meetings, etc.)?	V		The Company has had full-time personnel responsible for providing the directors with the necessary information for business operation, handling matters related to the board meetings and shareholders meetings lawfully, handling company registration and change registration, and preparing minutes of the board meetings and shareholders meetings. The other corporate governance related matters will be handled by personnel from appropriate units depending on the Company’s business operation.	No significant difference occurred.

Evaluation Item	Operations			Difference from the “Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies” and the reasons
	YES	No	Summary Description	
V. Has the company established communication channels with stakeholders (including but not limited to shareholders, employees, customers, suppliers, etc.), set up a page specially for stakeholders on the company’s website, and appropriately responded to the important corporate social responsibility issues of concern to stakeholders?	V		The Company maintains good communication channels with banks, suppliers, and other stakeholders. The Company also has a dedicated person and an e-mail to handle matters related to the Company’s external relations and stakeholders.	No significant difference occurred.
VI. Does the company contract a professional stock affairs agency to handle the affairs of the shareholders meeting?	V		The Company has appointed the Agency Department of China Trust Commercial Bank as the Company’s stock agency to handle matters related to stock affairs.	No significant difference occurred.
VII. Information disclosures: (I) Does the company set up a website to disclose financial business and corporate governance information?	V		The Company has set up a website to regularly update financial business information and corporate governance implementation.	No significant difference occurred.
(II) Does the company adopt other information disclosure methods (Such as, the company has set up an English website, appointed a person to be responsible for the collection and disclosure of information, implementation of the spokesperson system, investor conferences, etc.)?	V		The spokesperson system has been implemented, and the Company’s operation information has been disclosed in accordance with the information disclosure regulations; also, an English website has been set up.	
(III) Does the company announce and report the annual financial statements within two months after the end of the fiscal year, and announce and report the financial statements for the first, second, and third quarters and the operating conditions of each month before the specified deadline?		V	The Company’s annual financial report, the first, second, and third quarter financial reports and the operating conditions of each month are announced and reported within the prescribed time limit.	There should be no significant difference occurred.
VIII. Does the company have other important information that is helpful to understand the operation of corporate governance (including but not limited to employee interests, employee care, investor relations, supplier relations, stakeholders’ rights, continuing education of directors and supervisor, the implementation of risk management policies and risk measurement standards, the implementation of customer policies, the company’s purchase of liability insurance for directors and supervisors, etc.)?	V		The Company values the importance of the rights and interests of employees. Please refer to the “Five. Operation Overview” in this annual report for the relevant measures. Investor relations, supplier relations, and rights of stakeholders: The Company has designated spokespersons and full-time investor relations personnel to assist investors, and suppliers and stakeholders in inquiring about the Company’s operation status or related rights and interests. The Company maintains good communication channels with banks, suppliers, and other stakeholders. The Company also has a dedicated person and an e-mail to handle matters related to the Company’s external relations and stakeholders. Advanced study of directors and supervisors: The Company has provided information on training courses to directors and independent directors. The liability insurance acquired by the Company for directors: The Company has purchased liability insurance for directors and independent directors.	No significant difference occurred.
IX. Please explain the corrective action performed for the corporate governance evaluation results issued by the Corporate Governance Center of Taiwan Stock Exchange Corporation in the most recent year, and propose prioritized enhancements and measures for those that have not yet been corrected: Plans will be made to gradually improve the nonconformities found in the corporate governance evaluations in order to substantiate corporate governance.				

(IV) The compositions, responsibilities, and operations of the Remuneration Committee or Nomination Committee, if it is available:

1. Information of the Remuneration Committee members:

Identity (Note)	Terms	Professional qualifications and experience (Note 2)	Independence status (Note 3)	Number of Publicly Listed Companies that He/She also Works as a Member of the Remuneration Committee
	Name			
Convener & Independent Director	Yang, Jung-Kung	Please refer to pages 19-23 of this annual report for information on directors, and pages 24-26 of this annual report for information on directors' professional qualifications and the independence of independent directors.	Please refer to pages 24-26 of this annual report for information on directors' professional qualifications and independence of independent directors.	0
Independent Director	Tseng, Tsung-Lin			1
Independent Director	Cheng, Jian-Jong			0

Note: Please indicate the identity as either Director, Independent Director, or Other.

2. Responsibilities of the Remuneration Committee:

The responsibilities of the Company's Remuneration Committee are to assess the performance evaluation and remuneration policy, system, and standard structure of the Company's directors and managerial officers in a professional and objective position; also, evaluate the remuneration of directors and managerial managers at least once a year. Propose recommendations to the Board for Discussion and for reference in decision-making.

3. Operation of the Remuneration Committee:

(1) The Company's Remuneration Committee is with 3 members on board.

(2) The term of office of the incumbent (4<sup>th</sup>) members of the Audit Committee: From June 5, 2020 to June 4, 2023, a total of 2 Remuneration Committee meetings (A) were held in 2022 with the attendance of the members as follows:

Job Title	Name	Actual attendance (B)	Attendance by proxy	Actual attendance rate (%) (B/A)	Remarks
Member	Yang, Jung-Kung	2	0	100%	Re-elected on June 5, 2020
Member	Tseng, Tsung-Lin	2	0	100%	Re-elected on June 5, 2020
Member	Cheng, Jian-Jong	2	0	100%	Elected on June 5, 2020

Other matters to be recorded:

Remuneration Committee	Proposal content and subsequent processing	Resolution	The Company's handling of the opinions of the Remuneration Committee
February 23, 2022	<ol style="list-style-type: none"> <li>1. Passed the 2021 remuneration to employees and directors.</li> <li>2. Passed the 2021 Manager Bonus and 2022 Salary proposal.</li> <li>3. Passed the resolution of issuing employee stock warrants and new restricted employee shares to employees.</li> </ol>	Resolved by the committee members unanimously	Deliberated by the board of directors and resolved by the directors present unanimously
November 1, 2022	<ol style="list-style-type: none"> <li>1. Passed the 2022 Rules Governing the Issuance of Employee Stock Warrants and Share Subscription.</li> <li>2. Passed the proposal for remuneration adjustment to managerial officers.</li> </ol>	Resolved by the committee members unanimously	Deliberated by the board of directors and resolved by the directors present unanimously

- I. If the board of directors does not adopt or amend the recommendations of the Remuneration Committee, the date, term, proposal content, resolution of the board of directors, and the company's handling of the opinions of the Remuneration Committee (such as, the remuneration approved by the board of directors is superior to the recommendation of the Remuneration Committee, the differences between them, and reasons should be stated): None
- II. For matters resolved by the Remuneration Committee, except for the objections or reservations of the members that have been recorded or stated in writing, the date, term, proposal content, all members' opinions, and the handling of the members' opinions shall be stated: None

Notes:

- (1) The resignation date of a Remuneration Committee member who resigned before the end of the fiscal year should be indicated in the "Remark" column. The actual attendance rate (%) shall be calculated based on the number of Remuneration Committee meetings convened during the office term of the resigned member and the actual number of Remuneration Committee meeting attended by the resigned member.
- (2) If there is a Remuneration Committee member re-election convened before the end of the fiscal year, the name of the new and old members shall be filled in with the information of newly elected member, incumbent member, re-elected member, and the re-election date indicated in the "Remark" column. The actual attendance rate (%) shall be calculated based on the number of Remuneration Committee meetings convened during the office term of such member and the actual number of Remuneration Committee meeting attended by such member.

(V) The promotion and operation of the sustainable development and its differences from the “Sustainable Development Best Practice Principles for TWSE/TPEX Listed Companies” and the reasons:

Evaluation items	Operations			Difference from the “Sustainable Development Best Practice Principles for TWSE/TPEX Listed Companies” and the reasons
	Yes	No	Summary Description	
I. Has the company established a governance structure to promote sustainable development, set up a dedicated (part-time) unit to promote sustainable development; also, is the senior management authorized and supervised by the Board of Directors?		V	Although the Company has not yet established a governance structure to promote sustainable development, the Company will continue to observe sustainable development issues and continue to realize social responsibility, and will formulate relevant policies in the future depending on the actual practice.	The Company will evaluate and establish a governance structure to promote sustainable development depending on the Company’s operating conditions, which will be carried out by relevant units in compliance with regulations.
II. Does the company, according to the materiality principle, conduct risk evaluation towards environmental, social, and corporate governance issues related to operations of the company and enact relevant risk management policies and strategies? (Note 2)		V	The Company has not yet conducted relevant evaluation in accordance with the principle of materiality.	The Company will conduct risk evaluation on environmental, social, and corporate governance issues related to the company’s operations in compliance with regulations.
III. Environmental issues (I) Has the company established an appropriate environmental management system according to its industrial characteristics?	V		The Company has established an appropriate environmental management system, and valued the importance of and cooperated with the environmental protection directives of local laws and regulations.	No difference occurred
(II) Is the company committed to improving energy efficiency and using recycled materials with low impact on the environment?	V		The Company’s efforts in improving the utilization efficiency of various resources include the use of ERP systems and e-mails, replacing the printing of correspondence and official letters with electronic forms in order to protect the resources on the Earth.	No difference occurred
(III) Does the company evaluate the impact of climate change on the current and future potential risks and opportunities with countermeasures adopted in response to the climate-related issues?	V		In order to slow down and adapt to climate change, the Company strives to use energy-saving equipment in the production process to reduce the consumption of electricity throughout the production process, and promotes policies related to energy saving and carbon reduction to employees in order to avoid energy waste.	No difference occurred
(IV) Has the company counted statistically the greenhouse gas emissions, water consumption, and total weight of waste of the last two years, and formulated policies for energy saving and carbon reduction, greenhouse gas reduction, water consumption reduction, or other waste management policies?		V	Global Communication Semiconductors, the main operating entity of the Company, conducts the relevant statistics and monitoring on greenhouse gas emission, water consumption, and total waste weight in accordance with the local laws and regulations in the United States. Although the Company has not developed relevant management policies, the Company also draws attention to the impact of operating activities on the natural environment. Apart from the energy conservation in the production process, the Company also addresses the policies related to energy conservation and carbon reduction to employees, in addition to properly handle the wastes by law and regulations. Moreover, the related department of the Company pays close attention and cooperates in the execution of	The Company will conduct statistics in accordance with relevant regulations and formulate relevant management policies.

Evaluation items	Operations			Difference from the “Sustainable Development Best Practice Principles for TWSE/TPEX Listed Companies” and the reasons
	Yes	No	Summary Description	
			government related environmental protection policies and decrees.	
IV. Social issues				
(I) Does the company formulate relevant management policies and procedures in accordance with relevant laws and International Bill of Human Rights?	V		The Company has formulated relevant management policies to actively shape a corporate environment that respects, cares, and protects human rights, and has promoted healthy and positive labor relations.	No difference occurred
(II) Does the company formulate and implement reasonable employee benefit measures (including remuneration, vacation and other benefits, etc.), and appropriately reflect business performance or results in employee remuneration?	V		The Company has handled the matter in accordance with the relevant laws and regulations. Please refer to pages 121-122 of this annual report for details. The Company has also formulated employee remuneration distribution regulations in the Company’s articles of incorporation.	No difference occurred
(III) Does the company provide employees with a safe and healthy working environment, and arrange safety and health education for employees regularly?	V		The Company has arranged safety and health education for employees occasionally.	No difference occurred
(IV) Has the company established an effective career development training program for employees?	V		The Company has planned necessary technical and knowledge training to cultivate the skills of employees according to the needs of each job position and the individual career plan.	No difference occurred
(V) Does the company follow relevant laws and regulations, and international standards, and formulate relevant policies and complaint procedures for the protection of consumers’ or customers’ rights and interests regarding issues related to customer health and safety, customer privacy, marketing, and labeling of products and services?	V		The Company ensures the quality of products and services in accordance with government laws and industry-related regulations. The Company’s marketing and labeling of products and services shall comply with relevant laws and regulations and international standards, and shall not deceive, mislead, fraud, or act to undermine consumer trust and damage consumer rights. In addition, the Company provides telephone, Internet, and other service platforms to let consumers communicate relevant issues, and makes transparent and effective customer complaint handling procedures available.	
(VI) Has the company formulated a supplier management policy, requiring suppliers to follow relevant codes on issues related to environmental protection, occupational safety and health, or labor rights, and their implementation?		V	The Company will evaluate whether the supplier has a record of damaging the environment and society before initiating any business transaction, and will avoid doing businesses with those who violate the corporate social responsibility policy. The Company when signing or renewing contracts with major suppliers in the future will include the requirements of complying with the corporate social responsibility policies of both parties depending on actual needs, and having the contracts terminated or rescinded at any time when the suppliers violate the policy with a significant impact on the environment and society.	The Company will formulate relevant specifications depending on the operating situation.
V. Does the company refer to the internationally accepted reporting standards or guidelines to prepare the sustainability reports that disclose non-financial information of the company? Has the aforementioned report received a		V	The Company has not yet prepared a sustainable development report, and will continue to observe relevant regulations and handle them in compliance with the requirements in the future.	The Company will prepare a sustainable development report according to the operation situation and legal regulations in the future.

Evaluation items	Operations			Difference from the “Sustainable Development Best Practice Principles for TWSE/TPEX Listed Companies” and the reasons
	Yes	No	Summary Description	
confirmation or guarantee opinion from a third-party verification unit?				
VI. If a company has formulated its “Sustainable Development Best Practice Principles” in accordance with the “Sustainable Development Best Practice Principles for TWSE/TPEX Listed Companies,” please describe the operation and its difference from the “Sustainable Development Best Practice Principles”: Although the Company has not formulated the sustainable development policy or system, the Company will continue to realize social responsibility with relevant policies formulated depending on the situation in the future.				
VII. Other important information that is helpful to understand the promotion and operation of sustainable development:  The Company understands the impact of sustainable development on the public; therefore, the Company will strive to operate the main business, provide employees with a stable and excellent working environment, and realize social responsibilities jointly with the stakeholders.				

Note 1: If you check “Yes” for the implementation situation, please specify the important policies, strategies, measures, and implementation situations adopted. If you check “No” for the implementation situation, please explain the circumstances and reasons for the differences in the “Difference from the ‘Sustainable Development Best Practice Principles for TWSE/TPEX Listed Companies, and the Reasons’” column, and explains the plans of adopting relevant policies, strategies, and measures in the future. Regarding the item 1 and 2, TWSE/TPEX Listed companies should provide a clear description of the governance and supervisory framework for sustainable development, including but not limited to management policies, strategy and goal setting, review measures, etc. Additionally, companies should outline their risk management policies or strategies regarding operational environmental, social, and corporate governance issues, as well as their assessment status

Note 2: The principle of materiality refers to the significant impact of environmental, social, and corporate governance issues on the Company’s investors and other stakeholders.

(VI) The operation of ethical corporate management and its differences from the “Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies” and the reasons:

Evaluation Item	Operations			Difference from the “Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies” and the reasons
	Yes	No	Summary Description	
I. Formulating ethical corporate management policies and plans (1) Does the company formulate an ethical corporate management policy approved by the Board of Directors, and clearly express the policy and practice of ethical corporate management in the company’s articles of incorporation and external documents; also, the commitment of the Board of Directors and management to actively substantiate the ethical corporate management policy?	V		The Company has established the “Ethical Corporate Management Best Practice Principle” to express the policy of ethical management and prevent unethical conducts.	No difference occurred

Evaluation Item	Operations			Difference from the “Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies” and the reasons
	Yes	No	Summary Description	
(II) Has the company established an evaluation mechanism for the risk of unethical conduct, regularly analyzed and evaluated the business activities with high risk of unethical conduct within the business scope with a plan for preventing unethical conduct formulated accordingly, which at least covering the matters stated in Article 7, Paragraph 2 of the “Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies?”	V		The Company for the sake of preventing any unethical conduct requires employees to take the initiative to explain the moral doubts and conflicts of interest encountered, and to comply with the norms of the ethical management. The Company’s preventive plan covers the following preventive actions: 1. Bribing and bribed. 2. Offer illegal political contributions. 3. Improper charitable donations or sponsorships. 4. Offer or accept unreasonable gifts, hospitality, or other improper profits. 5. Infringe business secrets, trademarks, patents, copyrights, and other intellectual property rights. 6. Engage in unfair competition. 7. Products and services directly or indirectly endanger the rights, health, and safety of consumers or stakeholders during the research and development, procurement, production, supply, or sale.	No difference occurred
(III) Has the company clearly defined operating procedures, guidelines for conduct, punishment and appealing systems in the unethical conduct prevention plan, implemented them, and regularly reviewed and revised the said plan?	V		The Company has formulated a plan for preventing unethical conduct in the “Ethical Corporate Management Best Practice Principle.” The Company and the directors, independent directors, managerial officers, employees, and substantial controllers shall act in accordance with the relevant regulations.	No difference occurred
II. Implementation of ethical corporate management (I) Does the company evaluate the ethical conduct record of the counterparties and specify the ethical conduct terms in the contracts signed with counterparties?	V		The Company prevents unethical business activities through customer credit limit evaluation and supplier credit evaluation system. The Company also states the relevant ethical conduct terms in the contracts signed with the counterparties.	No difference occurred
(II) Does the company set up a dedicated unit under the Board of Directors to promote ethical corporate management, and report the ethical corporate management policies, related prevention measures, and supervision of its implementation to the Board of Directors regularly (at least once a year)?		V	Currently, internal auditors perform regular audits and report the results of the audits to the board of directors.	The Company will formulate relevant measures and regularly report the implementation to the board of directors.
(III) Does the company have a policy formulated to prevent conflicts of interest, provide and implement appropriate channels for communication?	V		The Company’s employees who have a conflict of interest in business execution shall notify their direct supervisors in advance to be recused. The employees who have a conflict of interest in the resolutions reached may not engage in discussion and voting and shall be recused in accordance with the Company’s “Rules of Procedure for Board of Directors Meetings.”	No difference occurred
(IV) Has the company established an effective accounting system and internal control system for the implementation of ethical corporate management, and had the internal audit unit to formulate relevant audit plans based on the risk evaluation results of the unethical conducts, and checked the compliance of the plan in preventing unethical conduct accordingly, or entrusted a CPA to perform the audit?	V		The Company’s audit officer conducts audits in accordance with the annual audit plan approved by the board of directors, and reports the audit results to the board of directors, and also reports to the competent authority in accordance with regulations.	No difference occurred



Evaluation Item	Operations			Difference from the “Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies” and the reasons
	Yes	No	Summary Description	
(V) Does the company regularly hold internal and external education and training on ethical corporate management?	V		The Company regularly holds internal education and announcement on ethical corporate management.	No difference occurred
<p>III. Implementation of the company’s whistleblowing system</p> <p>(I) Has the company formulated a specific whistle-blowing and reward system, established a convenient reporting channel, and assigned appropriate personnel to deal with the reported party?</p> <p>(II) Has the company established standard operating procedures for the investigation of reported matters, the follow-up measures to be taken after the investigation is completed, and the relevant confidentiality mechanism?</p> <p>(III) Does the company take measures to protect whistleblowers from retaliation due to whistleblowing?</p>		V	The Company has not yet established a reporting and reward system, investigation standard operating procedures, and related confidentiality mechanisms. However, the Company has setup a mailbox and e-mail for employee complaints, and has full-time staff designated to handle employee complaints. The Company will have relevant operating procedures and management measures formulated according to actual needs to substantiate ethical corporate management in the future.	The Company will have relevant reporting methods formulated in accordance with the actual situation in order to establish reporting channels and handling procedures.
<p>IV. Enhance information disclosure</p> <p>Does the company disclose the content of its “Ethical Corporate Management Best Practice Principles” and the implementation effectiveness on its website and Market Observation Post System?</p>		V	The Company will disclose all relevant information of the Company on the Company’s website and Market Observation Post System.	The Company will disclose all relevant information of the Company on the Company’s website and Market Observation Post System.
V. If a company has formulated its “Ethical Corporate Management Best Practice Principles” in accordance with the “Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies,” please describe the operation and its difference from the “Ethical Corporate Management Best Practice Principles”: The Company has business operation conducted generally in accordance with the “Ethical Corporate Management Best Practice Principles.”				
VI. Other important information (such as, the company’s review and amendments of the Ethical Corporate Management Best Practice Principles, etc.) that is helpful to understand the operation of the company’s ethical corporate management: None				

(VII) Disclose the inquiry methods for the company’s Corporate Governance Best Practice Principles and relevant regulations, if any:

The Company has not formulated a corporate governance best practice principle, but has established operating procedures, such as, “Rules of Procedure for Shareholders Meetings,” “Rules of Procedure for Board of Directors Meetings,” “Operating Procedures for Related Party, Group Enterprises, and Specific Company Transaction,” “Internal Control System,” etc. The corporate governance related regulations are operated and implemented in accordance with the spirit of corporate governance. The operation of corporate governance will be promoted by revising relevant management measures, enhancing information transparency, and strengthening the functions of the board of directors.

(VIII) Other important information that is helpful to further understand the implementation of the Company’s corporate governance: None

## (IX) Implementation of internal control system

### 1. Internal Control Statement

#### **GCS Holdings Inc.** **Internal Control System Statement**

February 20, 2023

The Statement on the Company's 2022 Internal Control System according to the self-evaluation result is made as follows:

- I. The Company knows that it is the responsibility of the Board of Directors and managerial officers to establish, implement, and maintain the internal control system, and the Company has set up such system. It is intended for providing a reasonable assurance for an effective and efficient operation (including profit, performance, and protection of asset safety), reliability, timeliness, transparency of reporting, and compliance with relevant rules and regulations.
- II. There are some limitations to the internal control system. No matter how good the design is, an effective internal control system can only provide reasonable assurance to achieve the said three objectives. Additionally, due to changes in environment and situation, the effectiveness of the internal control system may change accordingly. However, the internal control system of the Company is developed with the self-monitoring mechanism and once a defect is identified, the Company will immediately adopt corrective actions.
- III. The Company determines the effectiveness of the internal control system design and implementation in accordance with the criteria defined in the "Regulations Governing Establishment of Internal Control System by Public Companies" (hereinafter referred to as the "Regulations"). The criteria for determining the effectiveness of the internal control system stated in the "Regulations" refers to the five elements of the internal control system that are gathered throughout a management and control process: 1. Control environment; 2. Risk evaluation; 3. Control operations; 4. Information and communication, and 5. monitoring operations. There are several sub-items under each composition element. Please refer to the "Regulations" for the aforementioned items in details.
- IV. The Company has adopted the aforementioned criteria for internal control system to evaluate the effectiveness of the internal control system design and implementation.
- V. The Company based on the aforementioned evaluation result believes that the internal control system (including supervising and managing the subsidiaries) as of December 31, 2022, including understanding the operating effect, the realization of efficiency, and reporting, is reliable, timely, transparent; also, the compliance with the relevant regulations, the design and implementation of the internal control system is effective and is sufficient to ensure the achievement of the aforementioned objectives.
- VI. The Internal Control System Statement will become major contents of the annual report and the prospectus of the Company, which will be disclosed to the public. Any misrepresentation and nondisclosure of the aforementioned contents is a violation against Article 20, 32, 171, and 174 of the Securities and Exchange Act and will be held accountable by law.
- VII. The Internal Control System Statement was approved by the Company's Board of Directors on February 20, 2023 and none of the seven attending directors objected. Therefore, the Internal Control System Statement was approved by the seven attending directors.

Chairman: Huang, Ta-Lun  
President: Ann, Bau Hsing

2. Internal Control System Review Report of the CPAs: None

(X) If the Company and the internal personnel have been punished by law, or the Company has punished the internal personnel for violating the provisions of the internal control system in the most recent year and as of the annual report publication date, and the said violation may have a significant impact on the shareholders' equity or securities prices, the content of the punishment, the major nonconformities, and the implementation of the corrective action should be detailed:  
None

(XI) The important resolutions of the shareholders meeting and the Board meeting in the most recent year and as of the annual report publication date:

Date	Board of Directors and Shareholders Meeting	Contents of Important Resolutions
1/21/2022	The 15 <sup>th</sup> meeting of the 4 <sup>th</sup> term of office	<ol style="list-style-type: none"> <li>1. Passed the 2022 budget.</li> <li>2. Passed the proposal of filing a Cayman Economic Substance Statement.</li> </ol>
2/23/2022	The 16 <sup>th</sup> meeting of the 4 <sup>th</sup> term of office	<ol style="list-style-type: none"> <li>1. Passed the 2021 consolidated financial statements (Note).</li> <li>2. Passed the amendments to the Company's organizational charter and articles of incorporation (Note).</li> <li>3. Passed the amendments to the Rules for the Acquisition or Disposal of assets (Note)</li> <li>4. Passed the 2021 Internal Control Statement (Note)</li> <li>5. Passed the proposal for redeeming the new restricted employee shares issued to the resigned employees and cancelling the decapitalization (Note).</li> <li>6. Passed the Cancellation of Treasury Stock (Note).</li> <li>7. Passed the proposal for the issuance of new restricted employee shares in 2022 and the plan(Note).</li> <li>8. Passed the 2021 business report (Note).</li> <li>9. Passed the Termination of Issuing Ordinary Shares for Cash Consideration or Issuing Ordinary Shares for participating in Issuance of GDR or Issuing CB or ECB by way of Private Placement as Resolved in 2021 Annual General Meeting (Note).</li> <li>10. Passed the 2021 Earning Distribution Proposal.</li> <li>11. Passed the issuance of employee stock options and restricted shares grants requests.</li> <li>12. Passed the 2021 Employees' and Directors' Compensation</li> <li>13. Passed the 2021 Executives' Bonus and 2022 Salary.</li> <li>14. Passed the 2021 Annual General Meeting agenda and proposals.</li> <li>15. Passed the announcement contents on accepting the proposals of shareholders who hold more than</li> </ol>

Date	Board of Directors and Shareholders Meeting	Contents of Important Resolutions
		1% of the Company's shares at the regular shareholders meeting.
3/11/2022	The 17 <sup>th</sup> meeting of the 4 <sup>th</sup> term of office	<ol style="list-style-type: none"> <li>1. Passed the Issuing Securities by way of Private Placement (Note).</li> <li>2. Passed the update of the Meeting Agenda for Annual General Meeting.</li> <li>3. Passed on accepting the nominations of directors by shareholders who hold more than 1% of the Company's shares</li> <li>4. Passed the nominations of director candidates.</li> <li>5. Passed Granting Waiver to Director's Engagement in any Business within the Scope of the Company's Business.</li> <li>6. Ratification of Revisions to the Restricted Shares and Option Grants (Note).</li> </ol>
4/6/2022	The 18 <sup>th</sup> meeting of the 4 <sup>th</sup> term of office	<ol style="list-style-type: none"> <li>1. Passed the list of potential subscribers of the securities issued by way of private placement (Note).</li> </ol>
5/3/2022	The 19 <sup>th</sup> meeting of the 4 <sup>th</sup> term of office	<ol style="list-style-type: none"> <li>1. Passed the 2022Q1 consolidated financial statements (Note).</li> <li>2. Passed the cancellation of restricted employee shares (Note).</li> </ol>
5/20/2022	Shareholders Meeting	<ol style="list-style-type: none"> <li>1. Passed the 2021 business report.</li> <li>2. Reported the Audit Committee's review on the 2021 financial reports.</li> <li>3. Reported the 2021 employees' and directors' compensation.</li> <li>4. Report on Implementation Status for Resolutions adopted by 2021 Annual General Meeting and 2021 Extraordinary General Meeting pertaining to Issuing Securities by way of Private Placement</li> <li>5. Approved the 2021 financial statements.</li> <li>6. Approved the 2021 earnings distribution proposal. Proposal implementation: It was resolved in the shareholders meeting not to have dividend distributed.</li> <li>7. Passed the amendments to the Company's articles of incorporation. Proposal implementation: The amended "articles of incorporation" is announced on the Company's website and handled in accordance with the amended procedures.</li> <li>8. Passed the amendments to the Rules for Acquisition or Disposal of assets. Proposal implementation: The amended "Rules for Acquisition or Disposal of assets" is announced on the Company's website and handled in accordance with the amended procedures.</li> </ol>

Date	Board of Directors and Shareholders Meeting	Contents of Important Resolutions
		<p>9. Passed the Issuance of 2022 Employee Restricted Shares and the Plan.  Proposal implementation: The issuance of restricted employee stock has been approved and notified by the FSC through letter No. 1110358985. It will take effect from October 12, 2022, and will be issued in installments according to its plan.</p> <p>10. Passed the Issuing Securities by way of Private Placement.  Proposal implementation: Due to the approaching deadline and considering the market conditions, timeliness, and feasibility, it was decided by the board of directors on February 20, 2023 to cancel the implementation.</p> <p>11. Passed the by-election to elect one director.  Proposal implementation: The elected list is as follows: New Director: Lee, Biing Jye</p> <p>12. Passed the proposal for lifting the non-compete restriction on new director  Proposal Implementation:  It was announced on the Market Observation Post System on May 20, 2022.</p>
8/2/2022	The 20 <sup>th</sup> meeting of the 4 <sup>th</sup> term of office	<ol style="list-style-type: none"> <li>1. Passed the change and appointment of CPA</li> <li>2. Passed the 2022Q2 consolidated financial statements (Note).</li> <li>3. Passed the Procedure for lending funds to other parties of GCS, LLC.</li> <li>4. Passed the Pledge of Equity Interest in the Contribution of Changzhou Chemsemi Co., Ltd. For Deferring payment of the share purchase price.</li> <li>5. Passed the ratification of CTBC (USA) bank load package by GCS, LLC.</li> <li>6. Passed the stock options grants request.</li> </ol>
11/1/2022	The 21 <sup>th</sup> meeting of the 4 <sup>th</sup> term of office	<ol style="list-style-type: none"> <li>1. Reported the 2022Q3 consolidated financial statements reviewed by the CPA (Note).</li> <li>2. Passed the 2023 audit plan (Note).</li> <li>3. Passed the proposal for redeeming the new restricted employee shares issued to the resigned employees and cancelling the decapitalization (Note).</li> <li>4. Passed the stock options grant requests.</li> <li>5. Passed the application for bank load by GDT and provide endorsement to GDT.</li> <li>6. Passed the dissolution and liquidation of wholly-owned subsidiaries (1) D-Tech Optoelectronics (Taiwan) Corporation; (2) GCOM Semiconductor Co., Ltd.</li> </ol>

Date	Board of Directors and Shareholders Meeting	Contents of Important Resolutions
		<ol style="list-style-type: none"> <li>7. Passed the fund lending to D-Tech Optoelectronics, Inc. by GCS LLC.</li> <li>8. Passed the participating in cash capital increase of Unikorn Semiconductor Corporation.</li> <li>9. Passed the 2022 Employees Stock Option Plan.</li> <li>10. Passed the revisions to Executive Compensation Plan.</li> <li>11. Passed the ratification of revisions to the 2022 employee restricted shares plan.</li> <li>12. Passed the revised Corporate Policies. <ol style="list-style-type: none"> <li>(1) Insider trading and nonpublic material information management rules</li> <li>(2) Rules and Procedures of Board of Directors Meeting</li> </ol> </li> <li>13. Passed the ratification of sale of equipment between wholly-owned subsidiaries D-Tech Optoelectronics (Taiwan) Corporation and GCS LLC.</li> <li>14. Passed the change and appointment of acting spokesperson of the company.</li> </ol>
1/18/2023	The 22 <sup>th</sup> meeting of the 4 <sup>th</sup> term of office	<ol style="list-style-type: none"> <li>1. Passed the 2023 budget.</li> <li>2. Passed the change and appointment of internal audit officer of the company.</li> <li>3. Reported the submission of the Cayman Economic Substance Statement.</li> </ol>
2/20/2023	The 23 <sup>th</sup> meeting of the 4 <sup>th</sup> term of office	<ol style="list-style-type: none"> <li>1. Passed the 2022 consolidated financial statements (Note).</li> <li>2. Passed the amendments to the Company's articles of incorporation (Note).</li> <li>3. Passed the 2022 Internal Control Statement (Note).</li> <li>4. Passed the proposal for the issuance of new restricted employee shares in 2023 and the plan (Note).</li> <li>5. Passed the 2022 business report (Note).</li> <li>6. Passed the termination of plan to issue securities by way of private placement as resolved in the Company's 2022 annual general meeting (Note).</li> <li>7. Passed the 2022 deficit compensation proposal (Note).</li> <li>8. Passed the issuance of employee stock options and new restricted employee shares to employees.</li> <li>9. Passed the 2022 employees' and directors' compensation proposal.</li> <li>10. Passed the 2022 Executive's Bonus and 2023 salary</li> <li>11. Passed the appointment of Corporate Governance Officer of the Company.</li> <li>12. Passed the 2023 regular shareholders meeting agenda and proposals</li> <li>13. Passed the announcement contents on accepting the proposals of shareholders who hold more than 1%</li> </ol>

Date	Board of Directors and Shareholders Meeting	Contents of Important Resolutions
		<p>of the Company's shares at the annual general meeting.</p> <p>14. Passed the announcement contents on accepting the directors and independent directors nominations of shareholders who hold more than 1% of the Company's shares at the annual general meeting.</p> <p>15. Passed the nomination of directors and independent directors candidates.</p> <p>16. Passed the waivers to directors' and independent directors' engagement in any business within the scope of the company's business.</p>

(Note) Matters listed in Article 14-5 of the Securities and Exchange Act.

(XII) The matters resolved by the Board of Directors with the dissent or reservation of the directors or supervisors recorded or documented in writing in the most recent year and as of the annual report publication date: None

(XIII) Summary of the resignations and dismissals of the Company's Chairman, President, accounting officer, financial officer, internal audit officer, corporate governance officer, and research and development officer in the most recent year and as of the annual report publication date:

Title	Name	Date of appointment	Date of termination	Reasons for resignation or termination
Internal audit officer	Lin, Shu-Wei	2016/3/2	2023/1/18	Job reassignment

#### V. Independent auditor's auditing fees

Amount unit: NT\$ Thousands

Name of Accounting firm	Name of CPA	Audit Period	Audit fees	Non-audit fees	Total	Remarks
PwC Taiwan	Bai, Shu-Chian	1/1/2022	9,565	858 (Note)	10,423	
	Cheng, Ya-Huei	~12/31/2022				

Note: The "other non-audit fees" includes NT\$190,000 for tax attestation service, NT\$295,000 for the issuance of employee stock options and new restricted employee shares, and NT\$373,000 for tax consulting services.

(I) If the CPA firm is replaced and the audit fee paid in the year of change less than in the year before, information on the audit fee amount before and after the said replacement and the root cause should be detailed: None

(II) If the audit fee paid in current year is more than 10% less from the year before, it is necessary to disclose the amount of reduction, percentage of reduction, and reasons for the reduction of public audit fees: None

VI. If there is a change of independent auditors in the last two years and subsequent periods, the following matters shall be disclosed:

(I) Former independent auditors

Date of replacement	It was resolved by the board of directors on August 2, 2022.
Reason for and description of the replacement	The arrangement of replacement is in cooperation with the internal rotation adjustment of PwC Taiwan. Starting from the second quarter of 2022, the financial report's CPA for the company were changed from Cheng, Ya-Huei and Lin, Yu-Kuan to Bai, Shu-Chian and

	Cheng, Ya-Huei.		
Please state whether the appointment is terminated or declined by the client or the independent auditor	Party		
	Status	CPA	Client
	Automatic termination of appointment	NA	NA
	Decline of (continuous) appointment	NA	NA
The audit reports with an opinion other than unqualified opinion issued in the last two years and the reasons	Audit report period	Audit report opinion	Reason for the audit report opinion
	Consolidated Financial Report for the second quarter of 2021	Qualified opinion	As of June 30, 2021, the investment balance accounted for using the equity method by the company represents 24% of the total consolidated assets. The share of comprehensive (loss) income of associates and joint ventures accounted for using the equity method for the periods April 1, 2021, to June 30, 2021, and January 1, 2021, to June 30, 2021, account for 82% and 96% of the total consolidated comprehensive income, respectively. Due to the inclusion of equity-method recognized financial statements of the investee companies in the Company's consolidated financial statements for the second quarter of 2021, which were not audited by the auditors, the auditors were unable to determine whether necessary adjustments should be made to those amounts. Therefore, an qualified opinion is expressed.
	Consolidated Financial Report for the second quarter of 2022	Qualified opinion	As of June 30, 2022, the investment balance accounted for using the equity method by the company represents 48% of the total consolidated assets. The share of comprehensive (loss) income of associates and joint ventures accounted for using the equity method for the periods April 1, 2022, to June 30, 2022, and January 1, 2022, to June 30, 2022, account for 262% and 304% of the total consolidated comprehensive income, respectively. Due to the inclusion of equity-method recognized financial statements of the investee companies in the Company's consolidated financial statements for the second quarter of 2022, which were not audited by the auditors, the auditors were unable to determine whether necessary adjustments should be made to those amounts. Therefore, a qualified opinion is expressed.
Is there a disagreement	Yes	Accounting principles or practices	



with the opinion of the issuer			Disclosures of financial statements
			Audit scope or steps
			Others
	No	V	
	Remarks:		
Other disclosures (Matters to be disclosed additionally as stated in Article 10, Paragraph 6, Subparagraph 1-4 ~ 1-7 of the “Regulations Governing Information to be Published in Annual Reports of Public Companies”)	None		

(II) Current independent auditors

CPA Firm	PwC Taiwan
Name of CPAs	Ms. Bai, Shu-Chian and Ms. Cheng, Ya-Huei
Appointment date	It was resolved by the board of directors on August 2, 2022.
Inquires on accounting treatment methods or accounting principles for specific transactions and possible opinions on financial reports before the appointment, and the results	Not applicable
Written opinions of the successor accountants that are different from the opinions issued by the predecessor accountants	Not applicable

(III) The written replies of the former independent auditor regarding the matters stated in Article 10, Paragraph 6, Subparagraph 1 and Subparagraph 2, Item 3 of the “Regulations”: Not applicable

VII. The Chairman, President, or officer in charge of financial or accounting matters of the Company, who has worked in the firm of the CPAs or its affiliated companies within the last year: None

VIII. Equity transfer and changes in equity pledge of directors, supervisors, managerial officers, and shareholders who have more than 10% shareholdings:

(I) Changes in shareholding of directors, supervisors, managerial officers, and shareholders with more than 10% shareholding

Job title	Name	2022		As of April 8, 2023	
		Increase (decrease) in shareholding	Increase (decrease) in shareholding	Increase (decrease) in shareholding	Increase (decrease) in shareholding
Chairman and Head of Strategic Development Office	Huang, Ta-Lun	-	-	-	-
Director/Chief Executive Officer & President	Ann, Bau Hsing	-	-	-	-
Corporate Director	Unikorn Semiconductor Corp. (Note 1)	-	-	-	-
Director	Shih, Wei	-	-	-	-
Director	Lee, Biing Jye (Note 2)	-	-	-	-

Job title	Name	2022		As of April 8, 2023	
		Increase (decrease) in shareholding	Increase (decrease) in shareholding	Increase (decrease) in shareholding	Increase (decrease) in shareholding
Independent Director	Yang, Jung-Kung	-	-	-	-
Independent Director	Tseng, Tsung-Lin	-	-	-	-
Independent Director	Cheng, Jian-Jong	-	-	-	-
Senior VP of R&D Unit	Wang, Shing-Kuo	24,500	-	24,500	-
Senior VP of Sales	Yu, Yeou-Chong	15,000	-	10,000	-
Senior VP of R&D Unit	Wang, Samuel	(71,500)	-	15,000	-
Senior VP of Sales	Yau, Wing	15,000	-	12,500	-
VP of Finance/Accounting Unit	Mark L. Raggio	15,000	-	12,500	-
VP of Operating Unit	Chen, Minkar	15,000	-	12,500	-
Corporate Governance Officer	Shu-Wei Lin	(Note 3)	(Note 3)	6,500	-

Note 1: Newly Elected in the by-election on July 2, 2021 and resigned on February 24, 2022. The statistical period of 2022 was from January 1, 2022 to February 24, 2022.

Note 2: Newly elected in the by-election on May 20, 2022 with the statistical period of 2022 from May 20, 2022 to December 31, 2022.

Note 3: The Board of Directors approved the appointment as the Corporate Governance Officer on February 20, 2023. There is no statistical data for the year 2022. The statistical period of 2023 was from February 20, 2023 to April 8, 2023.

(II) The counterparty of the share transfer and pledge is a related party: NA

IX. Information on the top ten shareholders who are related to each other or as spouses or relatives within the second degree of kinship:

April 8, 2023, Unit: Shares; %

Name	Principal's shareholding		Shareholdings of spouse and minors		Shareholdings in the name of others		Name (title) and relationship between top 10 shareholders who are related parties, spouses, or relatives within the second degree of kinship to one another (Note 2)		Remarks
	Number of Shares (Note 1)	Shareholding ratio (%)	Number of Shares (Note 1)	Shareholding ratio (%)	Number of Shares (Note 1)	Shareholding ratio (%)	Title (Name)	Relations	
ENNOSTAR INC.	9,028,000	8.11%	NA	NA	—	—	Harvestar Investment Corp.	A subsidiary of ENNOSTAR Group	
							Calystar Investment Corp.	A subsidiary of ENNOSTAR Group	
							Ronly Venture Investment Company	(Note 2)	
ENNOSTAR Group Representative: Lee, Biing Jye	—	—	—	—	—	—	—		
Harvestar Investment Corp.	9,013,000	8.10%	NA	NA	—	—	Calystar Investment Corp.	A subsidiary of ENNOSTAR Group	
							ENNOSTAR Group	Parent company – subsidiary	
							Ronly Venture Corporation	(Note 2)	
Harvestar Investment Corp. Representative: Lee, Biing	—	—	—	—	—	—	—		

Name	Principal's shareholding		Shareholdings of spouse and minors		Shareholdings in the name of others		Name (title) and relationship between top 10 shareholders who are related parties, spouses, or relatives within the second degree of kinship to one another (Note 2)		Remarks	
	Number of Shares (Note 1)	Shareholding ratio (%)	Number of Shares (Note 1)	Shareholding ratio (%)	Number of Shares (Note 1)	Shareholding ratio (%)	Title (Name)	Relations		
Jye										
Calystar Investment Corp.	6,500,000	5.84%	NA	NA	—	—	Harvestar Investment Corp.	A subsidiary of ENNOSTAR Group		
							ENNOSTAR Group	Parent company – subsidiary		
							Ronly Venture Corporation	(Note 2)		
Calystar Investment Corp. Representative: Lee, Biing Jye	—	—	—	—	—	—	—	—		
Chen, Yu-Zhen	4,943,000	4.44%	Data not available							
Joray Co., Ltd.	4,750,063	4.27%	NA	NA	—	—	—	—		
Joray Co., Ltd. Representative: Chong-Ren Huang	1,100,280	0.99%	2,488,350	2.24%	—	—	Mei-Yu He	Spouse		
Wei, Shih-Yu	3,710,886	3.35%	—	—	—	—	—	—		
Ronly Venture Corporation	3,500,000	3.14%	NA	NA	—	—	ENNOSTAR Group	(Note 2)		
							Harvestar Investment Corp.	(Note 2)		
							Calystar Investment Corp.	(Note 2)		
Ronly Venture Corporation Representative: Paul SL Peng	—	—	Data not available							
Hsieh, Shi-Han	3,043,000	2.73%	Data not available							
Chuan Wei Investment Co., Ltd.	2,500,000	2.25%	NA	NA	—	—	—	—		
Chuan Wei Investment Co., Ltd. Representative: Zhiguang Yan	—	—	—	—	—	—	—	—		
He, Mei-Yu	2,488,350	2.24%	1,100,280	0.99%	—	—	Chong-Ren Huang	Spouse		

Note 1: It is the information recorded in the shareholder register of the Company's latest book-entry closing date (April 8, 2023).

Note 2: Ronly Venture Corporation is a subsidiary of AUO Corporation, and AUO Corporation is a related party of ENNOSTAR Group.

X. The number of shares held in the same reinvested enterprise jointly by the company, the company's directors, supervisors, managerial officers, and enterprises directly or indirectly controlled by the company, and the comprehensive shareholding ratio jointly

December 31, 2022

Invested company (Note 1)	The Company's investment		Investment of the directors, supervisors, managerial officers, and directly or indirectly controlled business entities		Consolidated investment	
	Number of shares	Shareholding ratio	Number of shares	Shareholding ratio	Number of shares	Shareholding ratio
GCS USA	(Note 2)	100%	-	-	(Note 2)	100%
GCS Device Technologies Co., Ltd.	(Note 3)	100%	-	-	(Note 3)	100%
GCOM Semiconductor Co., Ltd.	5,000,000	100%	-	-	5,000,000	100%
D-Tech Optoelectronics, Inc.	-	-	360,000	100%	360,000	100%
D-TECH Optoelectronics (Taiwan) Corporation	-	-	5,800,000	100%	5,800,000	100%
Unikorn Semiconductor Corp.	131,400,000	42.06%	-	-	131,400,000	42.06%
Changzhou ChemSemi Co., Ltd.	(Note 3)	24.21%	-	-	(Note 3)	24.21%
Shanghai Zhouga Optoelectronics Co., Ltd.	(Note 3)	48%	-	-	(Note 3)	48%

Note 1: It is an investment under the equity method.

Note 2: GCS USA is a limited liability company, not a company limited by shares; therefore, no stock share is issued.

Note 3: It is a limited company, not a company limited by shares; therefore, no stock share is issued.

#### Four. Capital Overview

##### I. Capital and Shares

##### (I) Source of capital

##### 1. Formation of capital

April 8, 2023; Unit: NTD

Month / Year	Issue price (NT\$)	Authorized capital		Paid-in capital		Remarks		
		Shares	Amount	Shares	Amount	Source of capital	Paid-in capital with property other than cash	Others
November 2010	10	15,000	150,000	1	10	Registered Capital	None	
December 2010	10	70,000,000	700,000,000	1	10	Increase in authorized capital	None	
December 2010	10	70,000,000	700,000,000	30,694,587	306,945,870	Capital conversion	The company underwent a restructuring through a stock swap, resulting in the issuance of 30,694,587 shares outstanding.	
April 2011	10	70,000,000	700,000,000	32,835,587	328,355,870	Cash capital increase	None	
August 2011	10	70,000,000	700,000,000	35,096,587	350,965,870	Cash capital increase	None	
January 2011 December 2011	10	70,000,000	700,000,000	35,172,587	351,725,870	The stock warrants executed in 2011; 76,000 shares issued for capital increase.	None	
December 2011	10	70,000,000	700,000,000	36,490,587	364,905,870	Cash capital increase	None	
August 2013	10	70,000,000	700,000,000	36,867,587	368,675,870	New restricted employee shares increased by 377,000 shares	None	
October 2013	10	70,000,000	700,000,000	36,973,587	369,735,870	New restricted employee shares increased by 106,000 shares	None	
September 2014	10	70,000,000	700,000,000	41,956,587	419,565,870	Cash capital increase	None	
September 2014	10	70,000,000	700,000,000	41,976,587	419,765,870	Exercised employee stock options	None	
October 2014	10	70,000,000	700,000,000	45,304,209	453,042,090	capital increase from earnings	None	
March 2015	10	70,000,000	700,000,000	45,331,429	453,314,290	Exercised employee stock options	None	
April – June, 2015	10	70,000,000	700,000,000	45,890,240	458,902,400	Exercised employee stock options and converted convertible bonds to new shares	None	
July – September 2015	10	70,000,000	700,000,000	46,908,917	469,089,170	Exercised employee stock options and issued new restricted employee shares	None	
October – December 2015	10	70,000,000	700,000,000	57,799,943	577,999,430	Issuance of shares for capital increase from earnings, cancellation of	None	

Month / Year	Issue price (NT\$)	Authorized capital		Paid-in capital		Remarks		
		Shares	Amount	Shares	Amount	Source of capital	Paid-in capital with property other than cash	Others
						new restricted employee shares, and converted convertible bonds to new shares		
January – March 2016	10	70,000,000	700,000,000	59,616,786	596,167,860	Issued new restricted employee shares, converted convertible bonds to new shares, and exercised employee stock options	None	
April – June 2016	10	90,000,000	900,000,000	60,206,286	602,062,860	Exercised employee stock options, converted corporate bonds to new shares, and cancelled new restricted employee shares	None	
July – September 2016	10	90,000,000	900,000,000	61,006,863	610,068,630	Exercised employee stock options, converted corporate bonds to new shares, and cancelled new restricted employee shares	None	
October – December 2016	10	90,000,000	900,000,000	74,402,266	744,022,660	Issuance of shares for capital increase from earnings, exercised employee stock options, converted corporate bonds to new shares, and cancelled new restricted employee shares	None	
January – March 2017	10	90,000,000	900,000,000	74,402,680	744,026,800	Exercised employee stock option	None	
April – June 2017	10	90,000,000	900,000,000	76,069,909	760,699,090	Exercised employee stock option and converted corporate bonds to new shares	None	
July – September 2017	10	90,000,000	900,000,000	79,460,443	794,604,430	Exercised employee stock option, converted corporate bonds to new shares, and issued new restricted employee shares	None	
October – December 2017	10	90,000,000	900,000,000	80,438,886	804,388,860	Exercised employee stock option, converted corporate bonds to new shares, and cancelled new restricted employee shares	None	

Month / Year	Issue price (NT\$)	Authorized capital		Paid-in capital		Remarks		
		Shares	Amount	Shares	Amount	Source of capital	Paid-in capital with property other than cash	Others
January – April 2018	10	90,000,000	900,000,000	81,929,001	819,290,010	Exercised employee stock options, converted corporate bonds to new shares, and issued new restricted employee shares	None	
May 2018	10	200,000,000	2,000,000,000	81,980,334	819,803,340	Exercised employee stock options and cancelled new restricted employee shares	None	
June – December 2018	10	200,000,000	2,000,000,000	82,169,126	821,691,260	Exercised employee stock options, issued new restricted employee shares, and canceled new restricted employee shares	None	
January – March 2019	10	200,000,000	2,000,000,000	90,177,022	901,770,220	Issuance of Global Depository Receipts (GDR), exercise of employee stock options, and cancellation of new restricted employee shares	None	
April – June 2019	10	200,000,000	2,000,000,000	90,747,022	907,470,220	Issuance of new restricted employee shares	None	
July – September 2019	10	200,000,000	2,000,000,000	90,791,129	907,911,290	Exercised employee stock options	None	
October – December 2019	10	200,000,000	2,000,000,000	90,833,504	908,335,040	Exercised employee stock options and cancelled new restricted employee shares	None	
January – July 2020	10	200,000,000	2,000,000,000	91,351,504	913,515,040	Issuance of new restricted employee shares	None	
August 2020	10	200,000,000	2,000,000,000	91,400,462	914,004,620	Exercised employee stock options	None	
September – October 2020	10	200,000,000	2,000,000,000	91,435,254	914,352,540	Exercised employee stock options	None	
November 2020 - March 2021	10	200,000,000	2,000,000,000	91,405,754	914,057,540	Cancelled new restricted employee shares	None	
April 2021 – August 2021	10	200,000,000	2,000,000,000	91,823,254	918,232,540	Issuance of new restricted employee shares and cancellation of new restricted employee shares	None	
September 2021 – November 2021	10	200,000,000	2,000,000,000	91,726,567	917,265,670	Exercised employee stock options and cancelled treasury stock	None	

Month / Year	Issue price (NT\$)	Authorized capital		Paid-in capital		Remarks		
		Shares	Amount	Shares	Amount	Source of capital	Paid-in capital with property other than cash	Others
December 2021 - February 2022	10	200,000,000	2,000,000,000	110,676,067	1,106,760,670	Exercised employee stock options, cancelled treasury stock and new restricted employee shares, and issued 20,000,000 common stock shares through private placement for cash capital increase	None	
March – April 2022	10	200,000,000	2,000,000,000	110,882,567	1,108,825,670	Exercised employee stock options, issued new restricted employee shares, and cancelled new restricted employee shares and treasury stock	None	
May –October 2022	10	200,000,000	2,000,000,000	110,842,067	1,108,420,670	Cancelled new restricted employee shares	None	
November 2022~February 2023	10	200,000,000	2,000,000,000	110,825,067	1,108,250,670	Cancelled new restricted employee shares	None	
March 2023	10	200,000,000	2,000,000,000	111,310,734	1,113,107,340	Exercised employee stock options, issued new restricted employee shares,	None	



## 2. Type of stock shares issued

April 8, 2023; Unit: Shares

Type of Stock	Authorized stock capital			Remarks
	Outstanding stock shares	Unissued shares	Total	
Common stock	111,310,734	88,689,266	200,000,000	Outstanding stock shares include: TPEX listing: 91,310,734 shares Private placement: 20,000,000 shares

3. Information on the shelf registration system: Not applicable

## (II) Shareholder structure

April 8, 2023

Shareholder structure Quantity	Government agency	Financial institution	Other juristic persons	Foreign institution and foreigner	Individuals	Treasury stock	Total
Number of persons	-	1	223	88	15,502	1	15,815
Shareholdings	-	234,000	42,083,893	5,241,419	63,729,922	21,500	111,310,734
Shareholding ratio	-	0.21%	37.81%	4.71%	57.25%	0.02%	100.00%
Shareholding of Mainland Area Investors: -, shareholding ratio: -							

Note: First-TWSE/TPEX listed companies and emerging companies should disclose the shareholding ratios of Mainland Area Investors. Mainland Area Investors refer to people, juristic persons, groups, and other institutions or their investment companies located in third country as defined in Article 3 of the "Regulations Governing Investment in Taiwan by Mainland Area Investors."

## (III) Equity dispersion (NT\$10 par)

April 8, 2023

Classification of shareholding	Number of shareholders	Shareholdings	Shareholding ratio (%)
1-999	11,820	156,422	0.14%
1,000-5,000	3,043	6,086,554	5.47%
5,001-10,000	386	3,059,840	2.75%
10,001-15,000	118	1,530,717	1.38%
15,001-20,000	89	1,658,411	1.49%
20,001-30,000	98	2,499,126	2.25%
30,001-40,000	56	2,021,651	1.82%
40,001-50,000	30	1,398,879	1.26%
50,001-100,000	59	4,033,741	3.62%
100,001-200,000	44	6,449,254	5.79%
200,001-400,000	34	8,962,029	8.05%
400,001-600,000	12	5,648,925	5.07%
600,001-800,000	4	2,715,546	2.44%
800,001-1,000,000	3	2,841,000	2.55%
Over 1,000,001 shares	19	62,248,639	55.92%
Total	15,815	111,310,734	100.00%

Note: This is the shareholder register information as of the latest book closure date, which was April 8, 2023.

## (IV) Major shareholders list

The Company's shareholders with more than 5% shareholding, or the name, shareholding, and shareholding ratio of the top-10 shareholders

April 8, 2023

Major shareholders	Shares	Shareholdings (shares)	Shareholding ratio
ENNOSTAR INC.		9,028,000	8.11%
Harvestar Investment Corp		9,013,000	8.10%
Calystar Investment Corp.		6,500,000	5.84%
Chen, Yu-Zhen		4,943,000	4.44%
Joray Co., Ltd.		4,750,063	4.27%
Wei, Shih-Yu		3,710,886	3.33%
Ronly Venture Corporation		3,500,000	3.14%
Hsieh, Shi-Han		3,043,000	2.73%
Chuan Wei Investment Co., Ltd		2,500,000	2.25%
He, Mei-Yu		2,488,350	2.24%

Note: This is the shareholder register information as of the latest book closure date, which was April 8, 2023.

(V) Market price, net worth, earnings, dividends, and related information in the last two years

Unit: NTD

Year \ Item		2021	2022	As of April 8, 2023	
Market price per share	Highest	54.20	49.3	39.25	
	Lowest	42.40	31.7	34.25	
	Average	50.44	40.39	36.85	
Net value per share	Before distribution	40.65	33.39	(Note 6)	
	After distribution	40.65	33.39(Note 4)	(Note 6)	
Loss per share	Weighted average of share number (thousand shares)		90,016	110,148	(Note 6)
	Loss per share (Note 5)	Before retroaction	(4.20)	(8.53)	(Note 6)
		After retroaction	(4.20)	(8.53)	Undistributed earnings
Dividend per share	Cash dividend		—	—(Note 4)	Undistributed earnings
	Stock dividend	Stock dividend from retained earnings	—	—	Undistributed earnings
		Stock dividend from capital reserve	—	—	Undistributed earnings
	Cumulative unpaid dividend		—	—	—
Return on investment analysis	Price-to-earnings ratio (Note 1)		—	—	(Note 6)
	Price-dividend ratio (Note 2)		—	—(Note 4)	Undistributed earnings
	Cash dividend yield rate (Note 3)		—	—(Note 4)	Undistributed earnings

Note 1: Price-to-earnings ratio = Average closing price per share of current year/earnings per share.

Note 2: Price-dividend ratio = Average closing price per share of current year/cash dividend per share.

Note 3: Cash dividend yield rate = Cash dividend per share/average closing price per share of current year.

Note 4: The proposal for the distribution of cash dividend was to be resolved by the board of directors according to the company's articles of incorporation. The board of directors had the said proposal resolved on February 20, 2023 that no cash dividends should be distributed, which was reported to the shareholders meeting on June 6, 2023.

Note 5: It is presented as a consolidated basic loss per share.

Note 6: The net value per share and earnings per share have not yet been reviewed by the independent auditors as of the annual report publication date (April 8, 2023). The data filled in the other columns are the data of the current year as of the annual report publication date.

(VI) The Company's dividend policy and the implementation

1. The Company's dividend policy stated in the Articles of Incorporation

According to Article 14.3A of the Company's articles of association: "If the Board, upon approval by a majority of the Directors at a meeting attended by two-thirds or more of the total number of the Directors, determines the dividends and bonus shall be paid in cash in whole or in part, in proportion to the number of shares held by them, and shall report to the Members in the next general meeting." In addition, according to Article 14.3 of the Company's articles of association: "The Board may, subject to approval by the Members by way of Ordinary Resolution or, in the case of Article 12.3(a), Supermajority Resolution and subject to these Articles and any direction of the Members in annual general meeting, declare dividends to be paid in shares to the Members, in proportion to the number of shares held by them."

In addition, according to Article 14.4 of the Company's articles of association: "Subject to the restrictions set out in this Article, dividends may be declared and paid out of profits of the Company, realised or unrealised, or from any reserve set aside from profits which the Board determine is no longer needed, or not in the same amount. In determining the Company's dividend policy, the Board recognises that the Company operates in a capital-intensive industry at the steady growth stage of its business, and in determining the amount, if any, of the dividend or other distribution the Board recommends to Members for approval in any financial year, the Board may take into consideration financial, business and operational factors of the Company. Dividends may also be declared and paid out of share premium account or any other fund or account which can be authorised for this purpose in accordance with the Law. Notwithstanding any other provision in these Articles and subject to compliance with the Law, if there are profits, in making the profits distribution recommendation, the Board shall set aside out of the profits of the Company for each financial year: (i) a reserve for payment of tax for the relevant financial year; (ii) an amount to offset losses incurred in previous years; and (iii) a special surplus reserve as required by the applicable securities authority under the Applicable Public Company Rules. After combining accumulated undistributed earnings in the previous years and setting aside a certain amount of remaining profits of such financial year as a reserve or reserves for development purposes as the Board may from time to time think fit, subject to the compliance with the Law, the Company shall distribute no less than 10% of the remaining profit as dividends to the Members.

Dividends to the Members may be distributed, in the discretion of the Board, by way of cash or by way of applying such sum in paying up in full unissued shares or a combination of both for allocation and distribution to the Members. Cash dividends to Members shall not be less than 10% of the total amount of dividends to Members. However, the Board may adjust payout ratio of annual cash dividends in any specific year based on the net profit and business operation of the Company during related fiscal years."

2. Dividend distribution proposed by the board of directors in the current year

The Company's board of directors resolved on February 20, 2023 not to have dividends distributed.

3. Expected significant changes in dividend policy: None

(VII) The impact of the proposed stock dividend in current year on the Company's operating performance and earnings per share: NA

(VIII) Compensation to employees, directors, and supervisors (The Company does not have supervisors appointed)

1. The percentage or range of remuneration to employees, directors, and supervisors stated in the Company's articles of association

According to Article 14.2 of the Company's articles of association, the Company shall allocate employees' and Directors' compensation out of current year's profit in the following sequence and manner:

- (a) no more than 15% and no less than 5% as employees' compensation;
- (b) no more than 2% as Directors' compensation ; and
- (c) accumulated losses of the Company be set aside before allocation, if any.

Compensation to the employees' may be distributed, in the discretion of the Board, by way of cash or by way of applying such sum in paying up in full unissued shares or a combination of both for allocation and distribution to the employees. The employees' compensation recipients may include qualified employees of the Company's Subsidiaries. And the Directors' compensation shall be distributed by way of cash.

2. The basis for the estimated compensation of employees, directors, and supervisors in the current period, the basis for the calculation of stock dividend distributed to employees as compensation, and the accounting treatment for the difference, if any, between the actual amount distributed and the amount estimated:

The compensation of the Company's employees and directors is based on the percentages stipulated in the Company's articles of association, which is estimated according to this principle every year. If there is a discrepancy between the actual distribution amount resolved by the board of directors subsequently and the estimated amount, it shall be handled in accordance with the change in accounting estimates and booked as profit or loss for the year as resolved by the board of directors.

3. The distribution of compensation approved by the Board of Directors

- (1) If the actual compensation paid to the employees, directors, and supervisors in cash or stock shares is different from the amount estimated and recognized as expense, the amount of discrepancies, reasons, and handling shall be disclosed:

The Company had a net loss before tax resulted in 2022. The board of directors resolved on February 20, 2023 not to distribute compensation to employees and directors; also, the 2022 financial report does not include estimated compensation of employees and directors.

- (2) The amount of employee compensation paid with stock share and ratio of such amount to the total of net income plus total employee compensation on the standalone and individual financial report: 0%

4. If there is difference between the actual distribution of compensation to employees, directors, and supervisors (including shares and amount distributed, and stock price) and the recognized compensation to employees, directors, and supervisors, the amount of difference, reasons, and handling process shall be stated:

The Company had a net loss before tax resulted in 2021. The board of directors resolved on February 23, 2022 not to distribute compensation to employees and directors; also, the 2021 financial report does not include estimated compensation of employees and directors.

(IX) The Company's repurchasing the Company's stock shares

April 8, 2023

Buyback term	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>
Buy back purpose	Transferred to employees	Transferred to employees	Transferred to employees
Buyback period	2016/08/18~2016/09/01	2016/11/11~2016/11/24	2017/03/01~2017/03/06
Buyback price range (NT\$)	77.30~79.80	64.90~69.90	51.00~53.00
Type and quantity of shares bought back	127,000 common stock shares	1,000,000 common stock shares	250,000 common stock shares
Share amount bought back (NT\$ thousand)	9,908	68,007	12,955
The ratio of the bought-back shares to the scheduled buy-back shares (%)	8.47	100.00	100.00
Number of shares cancelled and transferred	127,000 shares cancelled	1,000,000 shares cancelled	250,000 shares cancelled
The cumulative number of shares held in the Company	-	-	-
The ratio of the cumulative number of shares held in the company to the total number of issued shares (%)	-	-	-

Note: A total of 111,310,734 shares issued.

II. Disclosure of corporate bond: None

III. Disclosure of preferred stocks: None

IV. Issuance of Global Depository Receipts (GDR):

April 8, 2023

Issue (process) date		January 21, 2019	
Item			
Issuance and transaction place		The Luxembourg Stock Exchange (LuxSE)	
Total amount issued		US\$13,120,000	
Unit issue price		US\$8.20	
Total number of units issued		1,600,000 units	
The source of securities represented		Issuance of new share from cash capital increase	
Amount of securities represented		Global Depository Receipts (GDR) per unit representing interest in 5 common stock shares of the Company	
Rights and Obligations of Depository Receipt Holders		Same as the rights and obligations of common stock	
Trustee		NA	
Depository institution		The Bank of New York Mellon	
Custodian institution		Mega Bank	
Unredeemed balance		Fully redeemed	
The allocation methods on the relevant costs incurred as a result of the issuance and during the effective period		Borne by the issuing company	
Important agreements for depository and custody contracts		Please refer to depository agreement and custody contracts for details	
Market price per unit (US\$)	2022	Max.	US\$ 8.94
		Min.	US\$ 5.27
		Average	US\$ 6.75
	As of April 8, 2023 (Note 1)	Max.	US\$ 6.58
		Min.	US\$ 5.64
		Average	US\$ 6.19

Note 1: As of the annual report publication date (April 8, 2023).

## V. Disclosure of employee stock options

### (I) The company's outstanding employee stock options:

#### 1. Employee stock option plan in 2013~2017:

April 8, 2023

Types of Employee Stock Warrants	2013 Employee stock option plan	2014 Employee stock option plan	2015 Employee stock option plan	2016 Employee stock option plan	2017 Employee stock option plan
Effective date of declaration and total number of units	4/16/2013 3,000 units	11/3/2014 1,000 units	12/21/2015 1,000 units	12/28/2016 1,000 units	1/15/2018 1,000 units
Issue date	Note 1	Note 1	Note 1	Note 1	Note 1
Duration	10 years	10 years	10 years	10 years	10 years
Number of units issued	2,148.83 units (193.953 units expired)	797.2 units (136.022 units expired)	934 units (190 units expired)	230 units (15 units expired)	400 units (66 units expired)
Remaining units for issuance	851.17 units ( Note 3)	202.8 units ( Note 3)	66 units ( Note 3)	770 units ( Note 3)	600 units ( Note 3)
The ratio of subscribed shares to the total number of shares issued	1.93%	0.72%	0.84%	0.21%	0.36%
Contract performance	Issuance of new shares	Issuance of new shares	Issuance of new shares	Issuance of new shares	Issuance of new shares
Restricted subscription period and ratio (%)	From the date when two full years have elapsed after the Grant Date, the Optionee may exercise his/her Options in accordance with the schedule and percentage listed below: 1. From two years after the Grant Date, the Optionee may exercise up to 50% of the Options. 2. As to the remaining 50% of the Options, the Optionee may exercise ratably in equal installments of the succeeding 24 months, with each exercise taking place on the last day of each month.	From the date when two full years have elapsed after the Grant Date, the Optionee may exercise his/her Options in accordance with the schedule and percentage listed below: 1. From two years after the Grant Date, the Optionee may exercise up to 50% of the Options. 2. As to the remaining 50% of the Options, the Optionee may exercise ratably in equal installments of the succeeding 24 months.	From the date when two full years have elapsed after the Grant Date, the Optionee may exercise his/her Options in accordance with the schedule and percentage listed below: 1. From two years after the Grant Date, the Optionee may exercise up to 50% of the Options. 2. As to the remaining 50% of the Options, the Optionee may exercise ratably in equal installments of the succeeding 24 months.	From the date when two full years have elapsed after the Grant Date, the Optionee may exercise his/her Options in accordance with the schedule and percentage listed below: 1. From two years after the Grant Date, the Optionee may exercise up to 50% of the Options. 2. As to the remaining 50% of the Options, the Optionee may exercise ratably in equal installments of the succeeding 24 months.	From the date when two full years have elapsed after the Grant Date, the Optionee may exercise his/her Options in accordance with the schedule and percentage listed below: 1. From two years after the Grant Date, the Optionee may exercise up to 50% of the Options, and 2. As to the remaining 50% of the Options, the Optionee may exercise ratably in equal installments of the succeeding 24 months.
Number of shares already exercised	1,803,793 shares	437,809 shares	135,000 shares	—	—
Amount of exercised stock options	NT\$30,125,192	NT\$17,444,038	NT\$8,660,000	—	—
Number of unexercised stock options	146,084 shares	223,369 shares	609,000 shares	215,000 shares	334,000 shares
Exercise price per share for unexercised stock options	NT\$11.10~17.30	NT\$39.30	NT\$61.40~62.70	NT\$54.50~63.40	NT\$61.00~82.70



Types of Employee Stock Warrants	2013 Employee stock option plan	2014 Employee stock option plan	2015 Employee stock option plan	2016 Employee stock option plan	2017 Employee stock option plan
Ratio of unexercised stock options to the total issued shares (%)	0.13%	0.20%	0.55%	0.19%	0.30%
Impact on shareholders' equity	The presentation of financial statements is handled in accordance with generally accepted accounting principles, and it causes the original shareholders' equity being diluted year by year.				

Note 1: Previous issue dates and number of shares issued:

- (1) The 2013 Employee stock option plan: 1,538,000 shares were issued on April 18, 2013; 7,830 shares were issued on August 2, 2013; 538,000 shares were issued on October 24, 2013; and 60,000 shares were issued on January 21, 2014 for a total of 2,148,830 shares, of which, 193,953 shares expired.
- (2) The 2014 Employee stock option plan: 75,000 shares were issued on November 6, 2014; 30,000 shares were issued on January 20, 2015; 652,200 shares were issued on February 25, 2015; and 40,000 shares were issued on July 27, 2015 for a total of 797,200 shares, of which, 136,022 shares expired.
- (3) The 2015 Employee stock option plan: 5,000 shares were issued on March 2, 2016; 895,000 shares were issued on August 15, 2016; and 34,000 shares were issued on November 10, 2016 for a total of 934,000 shares, of which, 190,000 shares expired.
- (4) The 2016 Employee stock option plan: 15,000 shares were issued on February 23, 2017 and 215,000 shares were issued on August 3, 2017 for a total of 230,000 shares, of which 15,000 shares expired.
- (5) The 2017 Employee stock option plan: 13,000 shares were issued on January 19, 2018; 355,000 shares were issued on February 27, 2018; 27,000 shares were issued on August 3, 2018; and 5,000 shares were issued on November 2, 2018 for a total of 400,000 shares, of which, 66,000 shares expired.

Note 2: It is calculated based on the total issuance of 111,310,734 shares.

Note 3: Issuance period has expired.

## 2. The 2018-2022 Employee Stock Option Plan:

April 8, 2023

Types of Employee Stock Warrants	2018 Employee stock option plan	2019 Employee stock option plan	2020 Employee stock option plan	2021 Employee stock option plan	2022 Employee stock option plan
Effective date of declaration and total number of units	1/7/2019 1,000 units	1/7/2020 1,000 units	1/4/2021 1,000 units	1/11/2022 1,000 units	1/3/2023 1,000 units
Issue date	Note 1	Note 1	Note 1	Note 1	Note 1
Duration	10 years	10 years	10 years	10 years	10 years
Number of units issued	618 units (108 units expired)	259 units (70 units expired)	840 units (216 units expired)	513 units (50 units expired)	40 units
Remaining units for issuance	382 units (Note 3)	741 units (Note 3)	160 units (Note 3)	487 units (Note 3)	960 units
The ratio of subscribed shares to the total number of shares issued	0.56%	0.23%	0.75%	0.46%	0.04%
Contract performance	Issuance of new shares	Issuance of new shares	Issuance of new shares	Issuance of new shares	Issuance of new shares
Restricted subscription period and ratio (%)	From the date when two full years have elapsed after the Grant Date, the Optionee may exercise his/her Options in accordance with the schedule and percentage listed below: 1. From two years after the Grant Date, the Optionee may exercise up to 50% of the Options. 2. As to the remaining 50% of the Options, the Optionee may exercise ratably in equal installments of the succeeding 24 months.	From the date when two full years have elapsed after the Grant Date, the Optionee may exercise his/her Options in accordance with the schedule and percentage listed below: 1. From two years after the Grant Date, the Optionee may exercise up to 50% of the Options. 2. As to the remaining 50% of the Options, the Optionee may exercise ratably in equal installments of the succeeding 24 months.	From the date when two full years have elapsed after the Grant Date, the Optionee may exercise his/her Options in accordance with the schedule and percentage listed below: 1. From two years after the Grant Date, the Optionee may exercise up to 50% of the Options. 2. As to the remaining 50% of the Options, the Optionee may exercise ratably in equal installments of the succeeding 24 months.	From the date when two full years have elapsed after the Grant Date, the Optionee may exercise his/her Options in accordance with the schedule and percentage listed below: 3. From two years after the Grant Date, the Optionee may exercise up to 50% of the Options. As to the remaining 50% of the Options, the Optionee may exercise ratably in equal installments of the succeeding 24 months.	From the date when two full years have elapsed after the Grant Date, the Optionee may exercise his/her Options in accordance with the schedule and percentage listed below: 4. From two years after the Grant Date, the Optionee may exercise up to 50% of the Options. As to the remaining 50% of the Options, the Optionee may exercise ratably in equal installments of the succeeding 24 months.
Number of shares already exercised	—	—	—	—	—
Amount of exercised stock options	—	—	—	—	—
Number of unexercised stock options	510,000 shares	189,000 shares	624,000 shares	463,000 shares	40,000 shares
Exercise price per share for unexercised stock option	NT\$56.80~58.20	NT\$43.80~52.50	NT\$48.70	NT\$35.05~45.90	NT\$38.65
Ratio of unexercised stock option to the total issued shares (%)	0.46%	0.17%	0.56%	0.42%	0.04%
Impact on shareholders' equity	The presentation of financial statements is handled in accordance with generally accepted accounting principles, and it causes the original shareholders' equity being diluted year by year.				

Note 1: Previous issue dates and number of shares issued:

- (1) The 2018 Employee stock option plan: 578,000 shares were issued on March 15, 2019 and 40,000 shares were issued on August 9, 2019 for a total of 618,000 shares, of which, 108,000 shares expired.
- (2) The 2019 Employee stock option plan: 250,000 shares were issued on March 16, 2020; 3,000 shares were issued on August 5, 2020; and 6,000 shares were issued on November 9, 2020 for a total of 259,000 shares, of which, 70,000 shares expired.
- (3) The 2020 Employee stock option plan: 820,000 shares were issued on March 19, 2021 and 20,000 shares were issued on April 27, 2021 for a total of 840,000 shares, of which, 216,000 shares expired.
- (4) The 2021 Employee stock option plan: 454,000 shares were issued on February 23, 2022; 23,000 shares were issued on August 2, 2022; and 36,000 shares were issued on November 1, 2022 for a total of 513,000 shares, of which, 50,000 shares expired.
- (5) The 2022 Employee Stock Option Plan: 40,000 shares were issued on February 20, 2023.

Note 2: It is calculated based on the total issuance of 111,310,734 shares.

Note 3: Issuance period has expired.

(II) The managerial officers who have obtained employee stock warrants, and the names, acquisition, and subscription of the top-10 employees who have obtained stock warrants as of the annual report publication date

April 8, 2023  
Unit: USD/NTD; shares

	Job Title	Name	Number of shares acquired	The ratio of number of shares acquired to the total number of shares issued	Executed				Not executed			
					Number of shares subscribed	Stock subscription price executed	Stock subscription amount executed	The ratio of the number subscribed to the total number of shares issued	Number of shares not subscribed	Stock subscription price not executed	Stock subscription amount not executed	The ratio of the number not subscribed to the total number of shares issued
Managerial Officers	Chief Executive Officer & President	Ann, Bau Hsing	2,685,000	2.41%	1,200,000	NT\$11.35~ NT\$64.10 / US\$ 1.17	NT\$25,054,310 US\$231,660	1.08%	1,485,000	NT\$11.10~ NT\$79.70	NT\$80,395,200	1.33%
	Senior VP of R&D Unit	Wang, Shing-Kuo										
	VP of Operating Unit	Chen, Minkar										
	Senior VP of Sales	Yu, Yeou-Chong										
	VP of Finance /Accounting Unit	Mark L. Raggio										
	Senior VP of R&D Unit	Wang, Samuel										
	Senior VP of Sales	Yau, Wing										
Corporate Governance Officer	Lin, Shu-Wei											
Employee	Senior Engineering Manager	Chen, Frank Jianhorng	2,034,000 (288,750 shares expired)	1.83%	815,750	NT\$11.35~ NT\$65.40 / US\$ 1.17	NT\$15,572,818 US\$118,076.40	0.73%	929,500	NT\$39.30~ NT\$79.70	NT\$52,709,150	0.84%
	Special assistant	Curtis, Jerry (Note 2)										
	Senior Quality Supervisor	Fraser, James										
	Accounting Manager	Gu, Wenjie (Note 2)										
	VP of R&D Unit	Hou, Liping										
	Direct of R&D Unit	Kumar, Dhiraj (Note 2)										
Special Assistant to President	Li, Ya Ching (Note 2)											

	Job Title	Name	Number of shares acquired	The ratio of number of shares acquired to the total number of shares issued	Executed				Not executed				
					Number of shares subscribed	Stock subscription price executed	Stock subscription amount executed	The ratio of the number subscribed to the total number of shares issued	Number of shares not subscribed	Stock subscription price not executed	Stock subscription amount not executed	The ratio of the number not subscribed to the total number of shares issued	
	Process Engineering Manager	Luu, Lena T											
	President of D-Tech Optoelectronics, Inc.	Wu, Xiucheng											
	Direct of R&D Unit	Yang, Yuefei											

Note 1: It is calculated based on the total issuance of 111,310,734 shares.

Note 2: The said employee had resigned or retired as of the annual report publication date.

Note 3: Employee names are in alphabetical order by English surname.

VI. Disclosure of new restricted employee shares:

(I) New restricted employee shares

April 8, 2023

Type of new restricted employee shares	2021 New Restricted Employee Shares plan	2022 New Restricted Employee Shares plan
Date of effective registration and number of total shares	9/13/2021 1,000,000 shares	10/12/2022 1,000,000 shares
Issue date	Note 1	Note 1
New restricted employee shares issued	445,000 shares	483,000 shares
Number of new restricted employee shares available to be issued	555,000 shares (Note 3)	517,000 shares
Issue price	NT\$0	NT\$0
The ratio of new restricted employee shares issued to the total number of shares issued	0.40%	0.43%
Vesting conditions of new restricted employee shares	<p>As long as an eligible employee being granted the RS still stays employed, the percentage of the RS awards shall vest in accordance with the following schedule:</p> <p>A. First anniversary of the Grant Date, 50% of the total number of the granted RS.</p> <p>B. Second anniversary of the Grant Date, 50% of the total number of the granted RS.</p> <p>C. The Company shall have the right to forfeit and cancel all unvested RS awards without the payment of any consideration in the event that after the Grand Date that such employee has committed acts such as breaching his/her employment contract or work rules or violating the Plan.</p> <p>The Grant Date and the first day of Vesting Schedule referred to under</p>	<p>As long as an eligible employee being granted the RS still stays employed, the percentage of the RS awards shall vest in accordance with the following schedule:</p> <p>A. First anniversary of the Grant Date, 50% of the total number of the granted RS.</p> <p>B. Second anniversary of the Grant Date, 50% of the total number of the granted RS.</p> <p>C. The Company shall have the right to forfeit and cancel all unvested RS awards without the payment of any consideration in the event that after the Grand Date that such employee has committed acts such as breaching his/her employment contract or work rules or violating the Plan.</p> <p>The Grant Date and the first day of Vesting Schedule referred to under</p>

Type of new restricted employee shares	2021 New Restricted Employee Shares plan	2022 New Restricted Employee Shares plan
	this Plan means the record date of the capital increase.	this Plan means the record date of the capital increase.
The restricted rights of the new restricted employee shares	<p>The rights to the RS issued based on this Plan will be restricted as follows:</p> <p>(1) The employee shall not, with the exception of inheritance, sell, hypothecate, assign, give to others as a present, pledge or disposed in other way until such RS have vested.</p> <p>(2) The employee will have rights to attend, submit proposals, make a speech, vote at any meeting of shareholders according to an applicable trust or custodian agreement.</p> <p>Except for the above restrictions, the employee will have all rights as a shareholder of common shares with respect to the RS, whether vested or unvested, including but not limited to any rights to receive dividends, premiums, additional paid-in capital, and pre-emptive right to subscribe new shares issued for cash capital increase and to vote and act at any meeting of shareholders.</p>	<p>The rights to the RS issued based on this Plan will be restricted as follows:</p> <p>(1) The employee shall not, with the exception of inheritance, sell, hypothecate, assign, give to others as a present, pledge or disposed in other way until such RS have vested.</p> <p>(2) The employee will have rights to attend, submit proposals, make a speech, vote at any meeting of shareholders according to an applicable trust or custodian agreement.</p> <p>Except for the above restrictions, the employee will have all rights as a shareholder of common shares with respect to the RS, whether vested or unvested, including but not limited to any rights to receive dividends, premiums, additional paid-in capital, and pre-emptive right to subscribe new shares issued for cash capital increase and to vote and act at any meeting of shareholders.</p>
Custody status of new restricted employee shares	Trust custody, appointed custody, and bank custody	Trust custody, appointed custody, and bank custody
Measures to be taken when vesting conditions are not met	<p>Methods to handle the unvested RS awards or in the event of inheritance:</p> <p>A. Voluntary termination or discharge based on the causes not attributable to the Company: The Company shall forfeit and cancel all unvested RS awards without the payment of any consideration pursuant to laws in the event that the employee has terminated his/her</p>	<p>Methods to handle the unvested RS awards or in the event of inheritance:</p> <p>A. Voluntary termination or discharge based on the causes not attributable to the Company: The Company shall forfeit and cancel all unvested RS awards without the payment of any consideration pursuant to laws in the event that the employee has terminated his/her</p>

Type of new restricted employee shares	2021 New Restricted Employee Shares plan	2022 New Restricted Employee Shares plan
	<p>employment with the Company. Such unvested RS awards will be deemed not meeting vesting schedule as of the effective date of such employment termination.</p> <p>B. Retirement: The Company shall forfeit and cancel all unvested RS awards without the payment of any consideration pursuant to laws as of the effective date of retirement. Such unvested RS awards will be deemed not meeting vesting schedule as of the effective date of retirement.</p> <p>C. Temporary Leave Without Pay: For the employee who has been approved by the Company to be on temporary leave without pay pursuant to the laws and regulations, or due to critical illness, family incidents or overseas study plan, etc., his/her rights to unvested RS awards will resume from the date of return to the positions. However, the vesting schedule will be suspended to calculate based on the period of approved temporary leave without pay.</p> <p>D. Death: The Company shall forfeit and cancel all unvested RS awards without the payment of any consideration pursuant to laws as of the date of the employee's death. Such unvested RS awards will be deemed not meeting vesting schedule as of the date of the employee's death.</p> <p>E. Disability or Death Caused by Work Injury:</p> <p>a. In the event that the employee is physically</p>	<p>employment with the Company. Such unvested RS awards will be deemed not meeting vesting schedule as of the effective date of such employment termination.</p> <p>B. Retirement: The Company shall forfeit and cancel all unvested RS awards without the payment of any consideration pursuant to laws as of the effective date of retirement. Such unvested RS awards will be deemed not meeting vesting schedule as of the effective date of retirement.</p> <p>C. Temporary Leave Without Pay: For the employee who has been approved by the Company to be on temporary leave without pay pursuant to the laws and regulations, or due to critical illness, family incidents or overseas study plan, etc., his/her rights to unvested RS awards will resume from the date of return to the positions. However, the vesting schedule will be suspended to calculate based on the period of approved temporary leave without pay.</p> <p>D. Death: The Company shall forfeit and cancel all unvested RS awards without the payment of any consideration pursuant to laws as of the date of the employee's death. Such unvested RS awards will be deemed not meeting vesting schedule as of the date of the employee's death.</p> <p>E. Disability or Death Caused by Work Injury:</p> <p>a. In the event that the employee is physically</p>



Type of new restricted employee shares	2021 New Restricted Employee Shares plan	2022 New Restricted Employee Shares plan
	<p>disabled and cannot continue his/her employment due to work injury, all of the RS awards will be deemed vested as of the effective date of such employment termination.</p> <p>b. In the event of the employee's death due to work injury, all of the RS awards inherited by the heir(s) will be deemed vested as of the date of the employee's death.</p> <p>F. Severance or termination of employment contract due to causes attributable to the Company: The Company shall forfeit and cancel all unvested RS awards without the payment of any consideration pursuant to laws in the event that the employee is laid off by the Company. Such unvested RS awards will be deemed not meeting vesting schedule as of the effective date of such laid-off or such employment termination.</p> <p>G. Transfer: To facilitate the Company's business operation needs, an employee who is approved by the Chairman or his delegate to be transferred by the Company to a company which has the controlling or subordinate relationship with the Company (or within subsidiaries), the rights and obligations of all unvested RS awards shall not be affected. If an employee is transferred to the company which does not have the controlling or subordinate relationship with the Company,</p>	<p>disabled and cannot continue his/her employment due to work injury, all of the RS awards will be deemed vested as of the effective date of such employment termination.</p> <p>b. In the event of the employee's death due to work injury, all of the RS awards inherited by the heir(s) will be deemed vested as of the date of the employee's death.</p> <p>F. Severance or termination of employment contract due to causes attributable to the Company: The Company shall forfeit and cancel all unvested RS awards without the payment of any consideration pursuant to laws in the event that the employee is laid off by the Company. Such unvested RS awards will be deemed not meeting vesting schedule as of the effective date of such laid-off or such employment termination.</p> <p>G. Transfer: To facilitate the Company's business operation needs, an employee who is approved by the Chairman or his delegate to be transferred by the Company to a company which has the controlling or subordinate relationship with the Company (or within subsidiaries), the rights and obligations of all unvested RS awards shall not be affected. If an employee is transferred to the company which does not have the controlling or subordinate relationship with the Company,</p>

Type of new restricted employee shares	2021 New Restricted Employee Shares plan	2022 New Restricted Employee Shares plan
	the unvested RS awards shall apply to F of Paragraph (4) of this Article. H. For the reasons not mentioned above, the Chairman is authorized to approve vested percentage and vesting schedule, and shall be further submit to the Board for ratification.	the unvested RS awards shall apply to F of Paragraph (4) of this Article. H. For the reasons not mentioned above, the Chairman is authorized to approve vested percentage and vesting schedule, and shall be further submit to the Board for ratification.
Number of new restricted employee shares that have been redeemed or bought back	43,000 shares	0
Number of released new restricted employee shares	202,000 shares	0
Number of unreleased new restricted shares	200,000 shares	483,000 shares
The ratio of restricted shares to the total number of issued shares (%)	0.18%	0.43%
Impact on shareholders' equity	It does not cause the original shareholders' equity being diluted significantly.	It does not cause the original shareholders' equity being diluted significantly.

Note 1: Previous issue dates and number of shares issued:

The 2021 New restrict employee shares: 445,000 shares were issued on February 23, 2022, of which, 27,000 shares were redeemed and cancelled, and 16,000 shares were redeemed but not yet cancelled.

The 2022 New restricted employee share plan: 483,000 shares were issued on February 20, 2023.

Note 2: It is calculated based on the total issuance of 111,310,734 shares.

Note 3: Issuance period has expired.

(II) The managerial officers who have obtained new restricted employee shares and the names and shareholding of the top-10 employees as of the annual report publication date:

April 8, 2023  
Unit: Shares

	Job Title	Name	Number of new restricted employee shares obtained	Ratio of new restricted employee shares obtained to total number of issued shares	Restricted rights lifted			Restricted rights				
					Number of unrestricted shares	Issue price	Issue amount	Ratio of unrestricted shares to the total number of issued shares	Number of restricted shares	Issue price	Issue amount	Ratio of restricted shares to the total number of issued shares
Managerial Officers	Chairman and Head of Strategic Development Office	Huang, Ta-Lun	1,407,000 (25,000 shares expired)	1.26%	1,225,000	-	-	1.1%	157,000	-	-	0.14%
	Chief Executive Officer & President	Ann, Bau Hsing										
	Senior VP of R&D Unit	Wang, Shing-Kuo										
	VP of Operating Unit	Chen, Minkar										
	Senior VP of Sales	Yu, Yeou-Chong										
	VP of Finance/Accounting Unit	Mark L. Raggio										
	Senior VP of R&D Unit	Wang, Samuel										
	Senior VP of Sales	Yau, Wing										
	Corporate Governance Officer	Lin, Shu-Wei										
Employee	Special Assistant	Curtis, Jerry (Note 2)	901,000 (41,000 shares expired; 15,000 shares were redeemed but not yet cancelled)	0.81%	713,000	-	-	0.64%	132,000	-	-	0.12%
	Senior Quality Supervisor	Fraser, James										
	Accounting Manager	Gu, Wenjie (Note 2)										
	VP of R&D Unit	Hou, Liping										
	Direct of R&D Unit	Kumar, Dhiraj (Note 2)										
	Special Assistant to President	Li, Ya Ching (Note 2)										
	Process Engineering Manager	Luu, Lena T										
	Test Management Engineering Manager	Wang, Shiguang										
	President of D-Tech Optoelectronics, Inc.	Wu, Xiucheng										
	Direct of R&D Unit	Yang, Yuefei										

Note 1: It is calculated based on the total issuance of 111,310,734 shares.

Note 2: The said employee had resigned or retired as of the annual report publication date.

Note 3: Employee names are in alphabetical order by English surname.

VII. Issuance of new shares in connection with the merger and acquisition of shares of other companies:

- (I) The new shares issued for merging or acquiring shares of other companies in the most recent year and as of the annual report publication date: None
- (II) For the issuance of new shares due to the merger or acquisition of other company's shares in the most recent year and as of the annual report publication date, the implementation situation and the impact on shareholders' equity shall be disclosed: None

VIII. Disclosure on use of funds:

(I) The 2019 Global Depositary Receipts (GDR)

1. Project content, project items, progress of capital utilization, and possible benefits

(1) Original plan content

- ① Approval date and document number of the competent authority for business objectives: Jin-Guan-Zhen-Far-Zi No. 1070326367 Letter dated July 31, 2018 of the Financial Supervisory Commission.
- ② The total plan budget: US\$57,042 thousand, equivalent to approximately NT\$1,711,260 thousand.
- ③ Source of funds: Issued Global Depositary Receipts (GDR) on January 21, 2019, which was a GDR representing interest in 5 common stock shares, for a total of 8,000,000 common stock shares.

Unit price issued: US\$8.20

Total units issued: 1,600,000 units

Total amount issued: US\$13,120 thousand

④ Progress of project and fund utilization

Unit: US\$ Thousands

Project items	Estimated completion date	Total funds needed		Scheduled fund utilization progress			
				2018	2019		
				Q4	Q1	Q2	Q3
Purchase of factories	2018Q4	USD	10,000	10,000	—	—	—
Purchase of machinery equipment	2018Q4	USD	20,000	20,000	—	—	—
Overseas material purchases	2019Q3	USD	27,042	—	9,000	9,000	9,042
Total		USD	57,042	30,000	9,000	9,000	9,042

- ⑤ Expected benefits: Respond to market demand and the company's future operational development needs, and increase revenue and profit.
- ⑥ The date of uploading information to the information reporting website designated by the Securities and Futures Bureau: Information was uploaded to the Market Observation Post System on October 3, 2018.

(2) Changed plan content

- ① Reason for change: The accumulative amount used before the change made was US\$721 thousand, and the remaining amount of US\$12,399 thousand were yet to be used and kept in bank deposits. Due to the impact of the China-US trade war, the originally planned purchase of plant and equipment fell behind the schedule, in order to respond to the growth of 5G market demand, the long-term operation and development, and effective use of raised funds, the board of directors resolved on November 7, 2019 to change the capital plan to invest in Unikorn Semiconductor Corp. (hereinafter referred to as “Unikorn”), which was approved by the Central Bank on November 21, 2019.
- ② Total capital required for the project: NT\$400,000,000.
- ③ Source of funds: The remaining funds raised from the issuance of Global Depositary Receipts (GDR) on January 21, 2019 for an amount of US\$12,399 thousand (approximately NT\$371,970 thousand) and proprietary funds of NT\$28,030 thousand for a total of NT\$400,000 thousand.
- ④ Progress of project and fund utilization

Unit: NT\$ Thousands

Project items	Estimated completion date	Total funds needed	Scheduled fund utilization progress
			2020Q1
Re-investment	2020Q1	NT\$400,000	400,000

- ⑤ Expected benefits: The shareholding ratio in Unikorn Semiconductor Corp. will go up from 14.09% to 36.06% after the change of the capital utilization plan. Unikorn Semiconductor Corp. will provide 6-inch wafer foundry services, combined with the Company’s advantages in III-V group elements compound semiconductor process technology to expand the foundry business, products, and customers in order to increase investment income, expand the Company’s operating scale, and enhance the Company’s competitiveness.
- ⑥ The date of uploading information to the information reporting website designated by the Securities and Futures Bureau: Information was uploaded to the Market Observation Post System on November 27, 2019.

## 2. Implementation and benefit analysis:

### (1) Implementation of the original plan:

October 31, 2019; Unit: US\$ Thousands

Project items	Implementation			Progress ahead or behind schedule, root causes, and improvement plans
Purchase of factory	Amount expensed	Estimated	10,000	Due to the impact and uncertainty from the China-US trade war, the originally planned purchase of plant, machinery equipment, and overseas materials fell behind the schedule. In response to the growth of 5G market demand and the long-term operation and development, the Company's board of directors resolved on November 7, 2019 to change the capital utilization plan.
		Actual	-	
	Progress (%)	Estimated	100.00%	
		Actual	-	
Purchase of machinery equipment	Amount expensed	Estimated	20,000	
		Actual	721	
	Progress (%)	Estimated	100.00%	
		Actual	3.06%	
Overseas material purchases	Amount expensed	Estimated	27,042	
		Actual	-	
	Progress (%)	Estimated	100.00%	
		Actual	-	
Total	Amount expensed	Estimated	57,042	
		Actual	721	
	Progress (%)	Estimated	100.00%	
		Actual	1.26%	

### (2) Execution of the changed plan:

March 31, 2020; Unit: NT\$ Thousands

Project items	Implementation			Progress ahead or behind schedule, root causes, and improvement plans
Re-investment	Amount expensed	Estimated	400,000	The planned project for reinvestment in Unikorn Semiconductor Corp. had been completed in 2020Q1 after the plan change, which was in line with the scheduled implementation progress.
		Actual	400,000	
	Progress (%)	Estimated	100.00%	
		Actual	100.00%	

### (3) Evaluation of implementation effects:

Founded in October, 2018, Unikorn Semiconductor Corporation engages in the professional foundry for Group III-V compound semiconductor components and the product array covers photoelectric and electric components. Unikorn Semiconductor has purchased equipment and started depreciation. Although the Company has shown significant progress in productivity, processing improvement and customer development, its revenue also grew. However, due to the impact of inflation and the sluggish demand for consumer electronics products, the Company has not reached the economic scale of orders. Moreover, the delay in the verification schedule after product completion, the Company's operation is still at loss

in 2022. For this reason, the Company recognized the investment loss in the amount of approximately NTD448,361 thousand in 2022. Unikorn Semiconductor Corporation will continue to build up capacity, expand the customer source with actions, strive for mass production orders, constantly improve processing efficiency, and speed up the product verification process, in order to make profits in the near future.

(II) Issuance of common stock shares through private placement for cash capital increase in 2021

1. Project content

(1) It was resolved in the Company's special shareholders meeting on December 10, 2021 to have common stock shares issued through private placement for cash capital increase. The said issuance of common stock shares is to be arranged within the threshold of 20,000 thousand shares, which included the shares issued for the long-term fundraising proposal as resolved in the shareholders meeting on July 2, 2021. The Company's board of directors resolved the issue price per share on December 10, 2021 with the capital increase base date scheduled on December 24, 2021. The Company had paid-in capital collected in full on December 24, 2021, and had the stock shares issued through private placement completely on January 18, 2022.

(2) The contents of each change made, reasons for each change, benefits before and after each change, and the date on which each change was presented in the shareholders meeting: Not applicable

(3) Source of funds: A total of 20,000,000 common stock shares was issued through private placement this time at NT\$10 par for an issue price of NT\$40.79 per share with a total of NT\$815,800,000 raised.

Please refer to pages 163-164 of this annual report for the subscribers in details.

(4) Intended fund utilization: It is to replenish working capital, reinvest, etc.

(5) The date of uploading information to the information reporting website designated by the Securities and Futures Bureau: The relevant information on pricing and the collection of proceeds for stock shares issued through private placement was uploaded to the "Private Placement" section of the Market Observation Post System on December 10, 2021 and January 6, 2022, respectively.

2. Implementation:

(1) Project implementation:

Project items	Implementation			Progress ahead or behind schedule, root causes, and improvement plans
	Amount expensed	Estimated	815,800	
Replenish working capital or reinvest		Actual	718,917	As of the first quarter of 2023, the disbursed amount of private equity funds is NT\$718,917 thousand. The breakdown is as follows: 1. NT\$700,000 thousand is allocated for reinvestment purposes, specifically participating in the cash capital increase of Unikorn Semiconductor Corporation. 2. NT\$18,905 thousand is allocated for enhancing working capital. 3. NT\$12 thousand is allocated for related bank charges. The rest of the fund was deposited in the bank.
	Progress (%)	Actual	100.00%	
		Actual	88.12%	

(2) Evaluation of implementation effects:

a. Reinvestment

Founded in October, 2018, Unikorn Semiconductor Corporation engages in the professional foundry for Group III-V compound semiconductor components and the product array covers photoelectric and electric components. Unikorn Semiconductor has purchased equipment and started depreciation. Although the Company has shown significant progress in productivity, processing improvement and customer development, its revenue also grew. However, due to the impact of inflation and the sluggish demand for consumer electronics products, the Company has not reached the economic scale of orders. Moreover, the delay in the verification schedule after product completion, the Company's operation is still at loss in 2022. For this reason, the Company recognized the investment loss in the amount of approximately NTD448,361 thousand in 2022. Unikorn Semiconductor Corporation will continue to build up capacity, expand the customer source with actions, strive for mass production orders, constantly improve processing efficiency, and speed up the product verification process, in order to make profits in the near future.

b. Enhancement of working capital



Item		Year	2021Q3 (Before the capital increase)	2021 (After the capital increase)
Financial structure	Debt ratio (%)		12.25	8.22
	Long-term fund to property, plant and equipment ratio (%)		531.09	824.88
Solvency	Current ratio (%)		815.78	1,543.02
	Quick ratio (%)		633.37	1,342.15
	Times interest earned		(76.61)	(82.59)
Financial information	Losses per share(in dollars)		(2.45)	(4.2)

Note : The calculations are based on the financial figures from the reviewed or audited consolidated financial statements for the third quarter and the full year of 2021.

Due to the benefits from equity investments not yet being evident, the Company experienced an increase in investment losses recognized under the equity method in the fourth quarter of 2021, leading to an increase in loss per share. However, after conducting a cash capital increase in the fourth quarter of 2021, the Company's debt ratio decreased from 12.25% to 8.22%. Additionally, the current ratio increased from 815.78% to 1,543.02% , and the quick ratio increased from 633.37% to 1,342.15% . These improvements in solvency and financial structure are evident after the capital increase.

## Five. Operation Overview

### I. Business activities

#### (I) Business scope

##### 1. The main business operation:

The Company is mainly engaged in the wafer foundry service of GaAs/InP/GaN advanced RF (5G and 6G) and optoelectronic component compound semiconductor, related intellectual property rights licensing, and the research, development, production, and sales of KGD-brand optoelectronic products.

##### 2. Ratio of main products and operating income

Unit: NT\$ Thousands; %

Main products	2021		2022	
	Amount	Ratio (%)	Amount	Ratio (%)
RF device wafer foundry	508,050	41.11	619,756	46.47
Optoelectronic device wafer foundry	251,155	20.32	282,407	21.17
KGD-brand optoelectronic products	470,304	38.05	431,013	32.31
Technical service income (Note)	6,372	0.52	634	0.05
Total	1,235,881	100.00	1,333,810	100.00

Note: Technical service income includes licensing fees and technical service income.

##### 3. The Company's current products and services:

The Company is engaged in the research, development, production, and sales of KGD-brand optoelectronic products, RF devices, power electronics devices, and optoelectronic devices wafer foundry in the United States. The Company offers a full range of services from product concept, technology research and development, and trial production to mass production in response to the specific need of each customer. In addition to the in-house process technology, the Company also provides whole plant input services to Integrated Device Manufacturers (IDMs), including process technology transfer, verification, and product trial production and mass production services. The product application functions can be divided into RF, power electronics and optoelectronic devices wafer foundry, and KGD-brand optoelectronic devices (KGD) as follows:

##### (1) RF device wafer foundry

GaAs, InP, GaN, and silicon carbide are used as wafer materials, used for the research, development, production, test, manufacturing, and sale of RF devices and power electronics wafer foundry, which are mainly used in the radio frequency circuits of wireless communication products, especially in the high-end radio frequency devices and power electronic devices of wireless communication base stations, mobile phones, and satellite aerospace and national defense.

##### (2) Optoelectronic device wafer foundry

GaAs and InP are used as wafer materials, used for the research, development, production, test, manufacturing, and sale of optoelectronic device wafers, which are mainly used in optical communication, medicine, wearable devices, automotive radar, and industrial applications.

(3) KGD-brand optoelectronic devices

The KGD-brand optoelectronic devices include the research, development, production, test, manufacturing, and sales of GaAs, InGaAs, PIN PD, non-hermetic PIN PD, backside illuminated photodiode, Laser Diode, Vertical-Cavity Surface-Emitting Laser (VCSEL), InGaAs avalanche photodiode (APD), etc. The KGD-brand products that have been developed and mass-produced can be applied to 155 Mbps, 10 Gbps, 25 Gbps, 50 Gbps, 100 Gbps, 200 Gbps, 400 Gbps, 800 Gbps, and 1,600 Gbps optical communication field, automotive radar, and wearable devices.

4. Strategic cooperation and joint venture overview:

- (1) The Company has invested NT\$1.664 billion in Unikorn Semiconductor Corp. located in Hsinchu Science Park, Taiwan, representing 42.06% shareholding, as of March 31, 2023. Unikorn Semiconductor Corp. is a joint venture of the Company and EPISTAR Corporation and engages in the operation of 6-inch compound semiconductor wafer foundry. The Company continues to provide technical support to Unikorn Semiconductor Corp. for the production of Advanced LEDs, GaN, BAW, EEL, APD, RF Device, VCSEL, etc. We will continue to introduce our existing customers to Unikorn Semiconductor Corp. for mass production in order to make up for the insufficient production capacity of 4-inch fab in the United States and to further expand foundry products and customer base in order to achieve the purpose of expanding the scale of operation and increasing profits.
- (2) The Company had invested RMB 309 million in Changzhou ChemSemi Co., Ltd. (Changzhou ChemSemi) located in National Hi-Tech Industrial Development Zone at Wujin District, Changzhou City, Jiangsu Province of China as of March 31, 2023, and held 24.21% equity of Changzhou ChemSemi. Changzhou ChemSemi is a joint venture of the Company and other companies and engages in the operation of 6-inch compound semiconductor wafer foundry with a focus on the wafer foundry in consumer electronic products. The Company for the purpose of responding to changes in international trade has invested in Changzhou ChemSemi to satisfy customers' needs for local production in order to achieve the purpose of expanding the scale of operation, increasing profits, and enhancing the competitiveness of the Company.
- (3) The Company had invested US\$5,016,000 in Shanghai Zhouga Optoelectronics Co., Ltd. (Shanghai Zhouga) located in China (Shanghai) Pilot Free Trade Zone as of March 31, 2023, and held 48% equity of Shanghai Zhouga. Shanghai Zhouga is an invested company of the Company and other companies. The Company also sold the 100%-owned subsidiary, Changzhou Galasemi Co., Ltd., to Shanghai Zhouga in July 2021 in response to the Group's operational planning. Shanghai Zhouga is mainly engaged in the sales of discrete-semiconductor device, and the technical services and development in optoelectronic technology in order to expand the market in China for the sale of optoelectronic devices subsequently.

5. New products and services planned for development:

- (1) RF and power electronics devices wafer foundry

- The 0.15 $\mu$ m GaN/SiC HEMT technology applied to mmWave high power amplifiers.
  - The 802.11ax, WiFi 6, WiFi 6E, and High Frequency High Power Efficiency GaAs HBT applied to mobile phone PA;
  - Low Noise GaAs E/D-mode pHEMT applied to mobile phone, WLAN, GPS, VSAT, and other receptors;
  - Application in WiFi6, 4G, 5G mobile phones and base station, and the high-performance acoustic wave resonator design and processing for satellite aerospace and national defense filters
  - Develop and apply (InP)HBT, UHF GaAs HBT, and GaN/Si HEMT technologies to 5G and future 6G mobile phones.
  - Apply GaN/Diamond to next-generation high power amplifiers.
  - Second-generation Gallium nitride (GaN) High electron mobility transistor (HEMT) processing.
  - Second-generation bulk acoustic wave processing.
- (2) Optoelectronic device wafer foundry
- Photonics Integrated Circuit (PIC) process. Apply the integration technology of semiconductor process to have several optical active components (such as, light-emitting lasers at the transmitting end, signal modulation and amplification, and photodiodes at the receiving end) and passive components (such as, waveguide and grating) fabricated on the same wafer. This process technology can break through the traditional TO-CAN or other combined components packaging methods to save costs, which plays an important role in the mass production of optical chips with low power consumption, small space, and ultra-high speed (above 400Gbps).
  - Vertical-Cavity Surface-Emitting Laser (VCSEL): VCSEL emits short wavelength (850nm) lasers that is contrary to long wavelength lasers; therefore, it is limited to the use within 500 meters. Due to the increasing number of data centers and the use of short-distance optical fiber lines in data centers, this laser is expected to be widely adopted in the near future. In addition to the aforementioned optical communication, VCSEL Array (wavelength 650-1000 nm) has a wide range of applications, such as hand-sign recognition sensing, infrared imaging, 3D scanning, biosensing, spectroscopy, interference measurement, etc. for consumer electronics (smartphone cameras, sensors, etc.), medical, automotives, industry, and national defense.
  - Optimize the custom-made VCSEL wafer process technology to improve the mass production yield rate for high-end cinema projectors.
  - Optimize custom-made Geiger-mode APD wafer process for 3-D LiDAR.
  - Optimize custom-made 100Gbps Integrated Coherent Receiver mass production wafer integration process.
  - Application in the 100GBaud PAM4 ((800Gb/s)) Photo Detector (PD) in data center.
- (3) KGD-brand optoelectronic devices
- The 1310-1550 nm Edge Emitting Lasers: This long-wavelength laser is used for optical fibers long-distance transmission, such as, the well-known Fiber to The Home (FTTH), EPON and GPON, and transmission between base stations. Due to the increasing number of base stations in the current 5G and future 6G eras, such long-wavelength lasers will become even more indispensable.
  - The 25G/100Gbps VCSEL: VCSEL emits short wavelength (850nm) lasers that is contrary to long wavelength lasers; therefore, it is limited to the use within 500 meters. Due to the increasing number of data centers and the use of short-distance

optical fiber lines in data centers, this laser is expected to be widely adopted in the near future.

- The 25Gbps avalanche photodiodes (APD) have better sensitivity than the traditional photodiodes. Therefore, APD is widely used in the largest amount of fiber-to-the-home (FTTH). Although 2.5Gbps and 10Gbps are the main items currently, the demand for 25Gbps APD can be expected due to the increasing data transmission volume.
- The 50Gbps / 100Gbps / 200Gbps / 400Gbps / 800Gbps / 1600Gbps Backside illuminated photodiode: Different from non-hermetic PIN PD, Backside illuminated photodiode can help improve the fiber illumination efficiency, increase the yield rate of customer module products, and help customers reduce the cost of producing the module.

(II) Industry overview

1. The current status and development of the industry

The Company’s main business operation is based on the Gallium Arsenide (GaAs), Indium Phosphide (InP), Gallium Nitride (GaN), and silicon carbide (SiC) of compound semiconductors to perform RF, power electronics, and optoelectronic device compound semiconductor wafer foundry, related intellectual property rights licensing, and the research, development, production, and sales of KGD-brand optoelectronic products.

The use of wafer materials in the semiconductor industry includes two categories: Element semiconductors and compound semiconductors. In terms of element semiconductors, Silicon (Si) and Germanium (Ge) are the most well-known materials used to form semiconductors. The compound semiconductors are mainly composed of Gallium (Ga), Indium (In), Aluminum (Al), and other group III elements, and Arsenic (As), Phosphorus (P), Nitrogen (N), and other group V elements, which is known as III-V group element compound semiconductor (hereinafter referred to as “III-V compound semiconductor”). It is further classified as binary, ternary, and quaternary compound semiconductors according to the number of elements. Especially, Gallium Arsenide (GaAs) technology is relatively mature with a wider range of applications; therefore, “GaAs” is often referred to as the general term for compound semiconductor in the semiconductor industry. In addition, the common compound semiconductors include IV-IV group compound semiconductors that are formed between group IV elements, and II-VI group compound semiconductors that are formed between Group II and Group VI elements. The common types of semiconductors are summarized in the table below.

Classification of Semiconductors

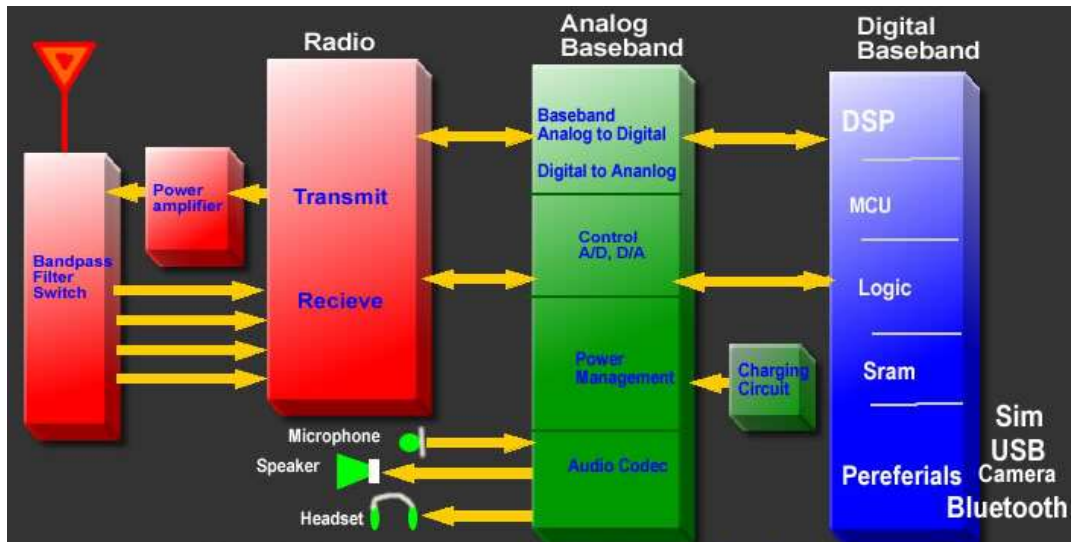
Name		Case	Application
Element semiconductor		Silicon & Germanium	Large-scale integrated circuit fabrication
III-V Group element compound semiconductor	Binary compound semiconductor	GaAs, InP, and GaN	High-speed communication devices and optoelectronic devices
	Ternary compound semiconductor	InGaAs, AlGaAs, InGaP, and InGaAsP	Materials for high-speed communication devices, infrared detectors, and solar cells

	Name	Case	Application
	Quaternary compound semiconductor	InGaAsP	Light sources and detectors, light-emitting diodes of optical communication
IV-IV Group element compound semiconductor	Binary compound semiconductor	Silicon Carbide and Silicon-germanium (SiGe)	High voltage and high-speed electronic components
II-VI Group element compound semiconductor	Binary compound semiconductor	Zinc Sulfide, Cadmium Telluride, and Cadmium Sulfide	Intended use of infrared

Compound semiconductors have two main characteristics and advantages compared to element semiconductors:

First of all, the electron mobility and electron saturation speed of compound semiconductors are faster than that of element semiconductors. Furthermore, compound semiconductors have the advantages of anti-interference, low noise, good linearity, and high voltage resistance; therefore, they are good for high-frequency transmission in wireless communications, such as, mobile phone, base station, wireless LAN, and satellite wireless communication. Among them, taking the circuit design of mobile phone as an example (as shown in the figure below), it includes Radio Frequency, Analog Baseband, and Digital Baseband. In terms of operating frequency, it is sequentially reduced from the RF receive, through the analog baseband to the digital baseband in order to initiate the calculation processing, and then reversed after the unit processing to send the radio signals sequentially from the Transmit through the Power Amplifier (PA) and the Bandpass Filter Switch. The operating frequency of the radio frequency circuit is the highest, which usually exceeds the operating frequency of 1GHz. If a silicon semiconductor is operated under high-frequency, its performance will be attenuated; therefore, it is relatively suitable to produce high-frequency RF devices with compound semiconductors. The PA, LNA, and Switch are the most frequently used devices in RF circuits, which are mostly made of compound semiconductors; also, GaAs and InP are the most frequently used materials.

Mobile phone circuit block function diagram



Secondly, III-V group compound semiconductors have high-efficiency photoelectric conversion characteristics, and they can easily convert light energy into electrical energy and vice versa, which is relatively rare in element semiconductors or IV-IV group compound semiconductors. Therefore, III-V group compound semiconductors can be used in fields that require high photoelectric conversion, such as, Light Emitting Diode (LED) and Laser Diode (LD), which convert electrical energy to light energy. On the contrary, when it is used in products, such as, Photo Detector (PD) or multi-interface solar cells of optical fiber equipment, light energy is converted to electrical energy.

At last, taking the properties of the most commonly used compound semiconductor material - gallium arsenide (GaAs) and element semiconductor material - silicon as an example, the characteristics of the two types of semiconductors are compared and summarized as shown in the table below.

Property Comparison of Compound Semiconductor Material - GaAs and Element Semiconductor Material - Silicon

	GaAs	GaN	Silicon
Maximum frequency range	2-300GHz, meet the long-distance communication needs	500MHz-100GHz	Below 30GHz
Maximum operating temperature	150 degrees Celsius	220	120 degrees Celsius
Electron mobility	High	Medium	Low
Voltage withstand capacity	Medium	High	Low
Radiation resistance	High	High	Low
With light energy conversion properties	Yes	Yes	No
Use at high frequencies	Low noise	Low noise	High noise, hard to overcome
Power consumption	Low	Low	High

	GaAs	GaN	Silicon
Component size	Small	Small	Large
Component performance (linearity, efficiency, and power density)	High	High	Low
Component Integration	Low	Low	High

The Company has engaged in the production of high-end RF devices and optoelectronic devices semiconductors for years. Currently, many countries in the world have successively set the next-generation mobile communication standard as 4G LTE (Long Term Evolution), 4.5G, 5G, and 6G, which is expected to activate the wave of mobile phone replacement and base stations expansion, resulting in the increasing demand for RF devices to be used in wireless communication. In addition, due to the increasing use of fixed networks and the Fiber to The Home (FTTH) solution or the “Last Mile Solution,” the dependence of telecom operators on related optical communication equipment has become more important, under the circumstance, optoelectronic devices have become the key products to optical communication equipment. Moreover, optoelectronic components have also started to be applied in new fields such as wearable devices, electric vehicles, automotive radar, and more. The Company’s main business operations of RF and optoelectronic devices compound semiconductor wafer foundry and KGD-brand optoelectronic products are introduced as follows:

① RF and Power Electronics Wafer Foundry

The compound semiconductors have been released for commercial use since the end of the Cold War between the United States and the Soviet Union in the 1990s, especially the prevailing of satellite systems, mobile communications, and wireless LAN. The compound semiconductors have gradually become well-known and widely used.

The booming development of satellite systems, mobile communications, and wireless LAN has caused the high demand for power amplifiers (PA), low noise amplifiers (LNA), and radio frequency switches (RF Switches) of RF devices in particular. In order to reduce the production cost and has the division of work implemented in the compound semiconductor industry same as the silicon semiconductor industry, the Integrated Device Manufacturers (IDMs) have some orders transferred to the professional GaAs fabs for mass production that allows the existing IDMs to focus on developing higher-level process or to invest resources in producing diversified products with high-margin and small quantity. Most importantly, due to the diversification of production sources, production technology is no longer monopolized by IDMs; therefore, more device designers (Fabless) are encouraged to invest in the design and development of compound semiconductor devices, resulting in a vigorous development of the compound semiconductor wafer foundry industry. The professional division of silicon semiconductors has again



surfaced in the compound semiconductor industry with a good circle of compound semiconductor industry created. In the long run, in addition to qualifying rigorous and lengthy customer verification, the compound semiconductor wafer foundry industry is also committed to creating process technologies with cost advantages, which grants the compound semiconductor wafer foundry industry with room to grow in the recent years.

The compound semiconductor production technology has a diversified development under the professional division of work. Currently, the production technology most frequently adopted in the industry can be summarized according to the epitaxial growth method, component structure, and performance characteristics as follows:

Classification and Comparison Table of Compound Semiconductor Process Technology

Epitaxial growth method	Component structure	Performance characteristics
Molecular Beam Epitaxy (MBE)	MESFET-Metal-Semiconductor Field-Effect Transistor	Homogeneous structure, good linearity, good uniformity, mature, and mature and stable process
	pHEMT - Pseudomorphic High Electron Mobility Transistor	Heterostructure, high electron speed, high electronics gain, low noise, and high operating bandwidth
Metal-Organic Chemical Vapor Deposition (MOCVD)	Low-level pHEMT - Pseudomorphic High Electron Mobility Transistor HBT-Heterojunction Bipolar Transistor	Heterogeneous structure, good linearity, good power amplification, and high operating bandwidth

The Company is a compound semiconductor device wafer fabrication company with the production technology mainly distinguished by the characteristics of the device structure. The production technology is introduced in accordance with the structure of the radio frequency device as follows:

A. Metal-Semiconductor Field Effect Transistor (MESFET)

MESFET device is the compound semiconductor process technology applied the earliest. The epitaxial wafer used in the process is mainly based on the Molecular Beam Epitaxy (MBE), which is mature and unexpensive. Although, the cost is much lower than the compound semiconductor technology, it takes two voltage sources to operate MESFET with inferior power output and electronics gain; therefore, it is not as important as the other technologies developed subsequently.

B. Pseudomorphic High Electron Mobility Transistor (pHEMT)

The pHEMT process is mostly based on the MBE epitaxial wafers. The

lower-level pHEMT process is based on the MOVCD epitaxial wafers that contains ultra-high frequency and low noise; therefore, it is widely used in high-power base stations and Low-Noise Amplifier (LNA), in particular, pHEMT device performs well under 1.5V state; therefore, it is more realistic to mobile products that requires long standby time. In addition, pHEMT is with the advantage of low noise; therefore, pHEMT has secured a certain market position in high-frequency microwave communication above 20GHz.

#### C. Heterojunction Bipolar Transistor (HBT)

The process of Heterojunction Bipolar Transistor (HBT) is with the “Metal-Organic Chemical Vapor Deposition” (MOCVD) adopted that is relatively different from the MESFET and pHEMT. The properties of MOCVD are high electronics gain, high power efficiency, high breakdown voltage, single power source design, high efficiency and low phase noise, etc.; therefore, it has become the mainstream technology of power amplifier (PA) and voltage-controlled oscillator (VCO) for high frequency wireless communication in the market.

#### D. Gan HEMT

Epitaxial wafer processing mostly adopts MOCVD due to its properties of wide band and resistance to extra-high voltage, which eventually becomes the mainstream technology of high frequency and high-power amplifiers.

### ② Optoelectronic device industry

The transmission, display, lighting, and recording of the optoelectronic devices are designed by taking advantage of the semiconductors that are able to have light energy and electrical energy easily converted in between. Therefore, the optoelectronic device industry refers to all industries that manufacture devices with the use of optoelectronic technology or manufacture the equipment and system with the use of optical devices as key components.

The applications of optoelectronic devices for light energy and electrical energy conversion are frequently seen in the products containing Light Emitting Diode (LED), Laser Diode (LD), Photodiodes (PD), Liquid Crystal Display (LCD), Complementary Metal-Oxide-Semiconductor Sensor (CMOS Sensor), Digital Video Disk (DVD), and Solar Cell. Since LED and PD with relatively high requirements for the conversion of electrical energy and light energy. The high-efficiency photoelectric energy conversion properties of this compound semiconductor make it an ideal active component for the production of optical fibers communication products, such as, LED and PD. Therefore, the photoelectric devices produced by the Company, such as, PIN PD (P-layer, Intrinsic-layer, N-layer Photo Detector, & PIN PD), Vertical- Cavity Surface-Emitting Laser (VCSEL), and Edge Emitting Lasers, are compound semiconductor devices closely related to the optical communication industry.

Optical communication refers to a method of transmitting information through

the medium of optical fiber, which is a wired communication having electrical signals, such as, sound, image, or data converted into optical signals at the transmitting end, and then transmit the information to the remote receiving end by the total reflection of laser in the optical fiber, and then pass the photodiodes to the receiving end, then the received optical signal is restored to an electrical signal through photodiodes again, decrypted through the calculation of the network processing unit in order to complete the communication purpose.

The high bandwidth, immunity from electromagnetic interference, confidentiality, light weight, small size, low dispersion, and low loss of optical communication are excellent characteristics beyond the reach of traditional copper wires and cables; therefore, it has gradually and completely replaced copper cables as a new generation communication transmission medium.

The construction of global communication networks has gradually prevailed. The infrastructure of the communication network is roughly divided into 4 categories, including Backbone, Wide Area Network (WAN), Metropolitan Area Network (MAN), and Local Area Network (LAN). Currently, the Backbone, WAN, and MAN are constructed with optical fibers, and it is a different story for LAN, which is known as the “Last Mile” construction for LAN and will become an important force for the development of the optical fiber industry in the future. The solution for the “Last Mile” construction of optical fiber is the “Fiber To The x (FTTx)” technology, which can effectively solve the difficulty of optical fiber deployment in the last mile, that is, having the optical fiber network extended from the LAN telecom room to end user equipment. There are four types of communication network technologies, including Fiber To The Cabinet (FTTCab), Fiber To The Curb (FTTC), Fiber To The Building (FTTB), and Fiber To The Home (FTTH). Due to the evolution of technology and the active promotion of policies by governments of many countries, there remains room for the growth of constructing optical fiber network in the last mile of the optical fiber industry, which can help drive the continuous development of the optical communication industry obviously.

In addition to the growth of the optical communication industry driven by the last mile optical fiber network construction, there remain some development trends in the optical communication industry worthy of expectation and helping create sustainable growth momentum for the industry. Consumers’ increasing demand for multimedia, such as, Internet TV, high-resolution digital TV, online games, interactive video applications, and the maturity of cloud computing technology, will encourage telecom operators to add the bandwidth of Backbone, WAN, and MAN, which will help increase the demand for optical fiber network device and equipment continuously. Also, the governments of many countries have successively finalized the relevant wireless communication specifications; therefore, the bandwidth of wireless communication must be increased for bigger capacity inevitably, resulting

in the need of having the communication bandwidth between base stations to base stations and base station to fixed network expanded as well. Under the circumstance, the demand for optical communication device is expected to grow. Furthermore, the Data Center adopts optical fiber technology to conduct data transmission, in order to replace the weight, density, and power consumption issues related to traditional copper wire solutions. Meanwhile, the transmission speed will be upgraded to 400 Gbps, 800 Gbps and 1,600 Gbps, and will impel the growth in photoelectric component market. Apart from the use of optical communication, photoelectric devices are also applied to some new fields such as wear device, electric vehicles and car radars.

Therefore, it is foreseeable that the compound semiconductor industry will move towards professional division of labor in the future regardless it is used in RF devices for wireless communication or optoelectronic devices for optical communication. The threshold of entering this industry is raising up; also, due to the difficulty of expanding the wafer fabrication capacity of existing fabs, and the demand for wafers for RF devices and optoelectronic devices will go up significantly due to the professional division of work for the outsourced orders from fabless design companies; also, the demand of end users will also go up due to the technology upgrade in product application; therefore, it is a niche market for the Company to develop further.

## 2. The correlation of the up-, mid-, and down-stream of the industry

The compound semiconductor industry can be roughly classified into the categories of compound substrates, epitaxial wafers, IC design, wafer fabrication, package testing, module factories, and system factories. Currently, the Company's wireless radio frequency is mainly based on wafer foundry. In terms of optoelectronic products, in addition to professional wafer foundry, the Company also engages in the research, development, production, and sales of KGD-brand optoelectronic products.

### (1) RF wafer foundry

Industry		Product items / Process Technology	Domestic manufacturers	Foreign manufacturers
Up-stream	Epitaxy	HBT/MOCVD pHEMT/MBE pHEMT/MOCVD	Visual Photonics Epitaxy Co., Ltd (VPEC)	IQE, etc.
	Design	IC design	Airoha Technology Corp. and Richwave Technology Corp.	M/A-COM, ADI, etc.
Mid-stream	Foundry	HBT (3 $\mu$ m, 2 $\mu$ m, 1 $\mu$ m) pHEMT (0.5 $\mu$ m, 0.25 $\mu$ m, 0.15 $\mu$ m) GaN HEMT (0.5 $\mu$ m, 0.25 $\mu$ m, 0.15 $\mu$ m)	Win Semiconductors Corp., Advanced Wireless Semiconductor Company, and Wavetek Microelectronics Corporation	Qorvo, GCS, and Wolfspeed

Industry		Product items / Process Technology	Domestic manufacturers	Foreign manufacturers
Down-stream	Package testing	Package testing	Tong Hsing Electronic Industries, Ltd. and Giga Solution Tech Co., Ltd.	Most of them are IDMs with package test performed internally
IDMs		RF IC (From design, production, to package testing are performed internally)	Transcom, Inc. and Hexawave, Inc.	Qorvo, Skyworks, etc.

### (2) Optoelectronic device wafer foundry

Industry		Product items / Process Technology	Domestic manufacturers	Foreign manufacturers
Up-stream	Epitaxy	GaAs, InGaAs, MOVCD, and MBE	Visual Photonics Epitaxy Co., Ltd. (VPEC)	IQE and IET-KY
	Design	Device design	-	M/A-COM, etc.
Mid-stream	Foundry		Win Semiconductors Corp., etc.	GCS, etc.
Down-stream	Package testing	TO-CAN COB	ELITE Advanced Laser Corporation	YSOD, PCL-KY, etc.

### (3) KGD-brand optoelectronic devices

Industry		Product items / Process Technology	Domestic manufacturers	Foreign manufacturers
Up-stream	Epitaxy	GaAs, InGaAs, MOVCD, and MBE	Visual Photonics Epitaxy Co., Ltd (VPEC)	IQE and IET-KY
Mid-stream	Devices	Device design and production	LuxNet Corp. and TRUELIGHT CORPORATION	GCS, M/A-COM, Lumentum, etc.
	Package testing	TO-CAN COB	ELITE ADVANCED LASER CORPORATION	YSOD, PCL-KY, etc.
Down-stream	Module	Tranceiver	Delta Electronics, Inc., Browave Corporation, etc.	XuChuang Opto-Electronic Co., Ltd. Hisense, etc.

## 3. Product development trends

### (1) RF wafer foundry

#### A. Gallium Arsenide (GaAs) HBT Technology

The qualities of light, thin, small, low power consumption, and low price are the key to the commercial success of any consumer electronic product, and the main direction for the future RF module design. Traditionally, each circuit product in RF modules is developed successfully based on respective technology. For example, the power amplifier (PA) is designed with HBT. Due to the increasing demand for 4G, 5G, and future 6G mobile phones and wireless RF base stations and basic equipment, and the better linearity and high power needed for communication equipment, GaAs mobile phone power amplifiers have become the irreplaceable mainstream. Therefore, the technology development of GaAs HBT will move

towards this direction in the future.

#### B. mmWave pHEMT and Wide Tuning-Range Phase Shifter

Wireless communication is gradually moving from Sub-6GHz 5G to mmWave pHEMT 5G (SATCOM). A Phased Array Antenna is used to effectively transceive signals with mmWave pHEMT. The RF devices of the Phased Array Antenna need high frequency power amplifiers, high frequency low noise amplifiers, and Wide Tuning-Range Phase Shifter. In addition to the GaN HEMT described below, the Company also has the technologies of 0.15 $\mu$ m pHEMT and Wide Tuning-Range varactor.

#### C. GaN HEMT technology

In terms of high-voltage and high-power amplifiers needed for wireless RF base stations and basic equipment, LDMOS (laterally-diffused metal-oxide semiconductor) devices made of silicon materials have always been accounted for as the majority because silicon material is much cheaper than GaAs. However, the linearity of LDMOS devices has reached a bottleneck at 3.8 GHz, which gives GaN HEMT a grand opportunity for development. Since GaN inherently possesses the characteristics of wide energy band and high voltage, high electron mobility, high electron saturation speed, high electron density, and high temperature tolerance, when GaN material is used under high voltage and high frequency, its high-speed electron mobility transistors can work at 28 volts, 48 volts, or even higher voltages; also, its power efficiency and linearity are superior to GaAs and LDMOS.

#### D. InP HBT Technology

GaAs HBT technology can be applied to LTE and 5G handheld device power amplifiers (sub-6GHz), but not to mmWave 5G power amplifiers that is mainly due to the fact that the cut-off frequency of InP HBT is much higher than that of GaAs HBT. Therefore, InP HBT technology is more suitable for mmWave 5G handheld device power amplifiers (except for the Company's newly developed GaAs Super HBT technology). The Company has a leading position in the application of InP HBT technology to high frequency power amplifiers. In addition, the Company has technologies to have InP HBT and optoelectronic devices integrated into Electronic-Photonic IC (EPIC).

#### E. BAW filter (bulk acoustic wave filter) process technology

The BAW resonator technology will surpass that of SAW resonator and will be used for 5G handheld devices (sub-6GHz) in the future.

#### (2) Optoelectronic device wafer foundry

The traditional Optical Transceiver is manufactured by integrating the Receiver Optical Subassembly (ROSA), Transmitter Optical Subassembly (TOSA), and other electronic components into one module. The ROSA is composed of a PD chip, a capacitor, and a Transimpedance Amplifier (TIA). The TOSA is composed of a laser chip and a monitoring photodiode, which involves a manpower-extensive

process.; therefore, the post-production cost of the wafer fabrication is high. If all the individual component can be integrated on one wafer or chip, the aforementioned assembly and labor costs can be eliminated. However, it is a relatively undeniable and difficult challenge to reduce the cost and improve the yield rate of wafer integration (PIC); therefore, it is one task to be attacked by the wafer fabrication industry.

(3) KGD-brand optoelectronic devices

Laser and PD are the two key parts to the optical communication device. Although the design of laser is crucial, the production laser epitaxy and the process of laser wafers are critical. Currently, most of the laser epitaxy is produced with 3-inch wafers, and the development of 4-6 inch wafers will be a big challenge to the epitaxy industry in the future. In terms of the laser wafer process, the challenge for wafer fabrication industry is how to develop a mass production process with an advantage in price.

4. Competition

(1) RF & Power Electronics Wafer Foundry

The RF device wafer foundry has been developed for years. There were more than ten companies engaged in wafer foundry in Taiwan and abroad before the year of 2001. However, since WiFi was not initiated before the year of 2004 and the threshold for entering the mobile phone power amplifier (PA) wafer foundry was high, some companies could not continue to operate, causing the GaAs foundry market underwent a reorganization. The surviving companies after the reorganization began to enjoy the rapid growth of WiFi after the year of 2004 and the penetration into the mobile phone power amplifiers (PA) foundry, low noise amplifiers (LNA), and RF Switch business. Currently, there are four companies in the market for the wafer foundry business, and their basic information and technical level are listed in the table below:

Fabs Advantage Analysis Table

Company		GCS, USA	WIN	Wavetek	AWSC
Basic information	Incorporation date	1997	1999	2010	1998
	Stock capital	NT\$1.1 billion	NT\$4.2 billion	NT\$1.8 billion	NT\$1.9 billion
	Company location	California USA	HWA YA Technology Park (Linko)	Hsinchu Science Park	Southern Taiwan Science Park
	Wafer size	4-inch and 6-inch	6-inch	6-inch	6-inch
Technology	InGaP HBT Mobile phone power amplifiers	V	V	Licensed from GCS, USA	Proprietary and licensed from GCS, USA
	InGaP HBT Base station power amplifiers	V	V	X	X

Company		GCS, USA	WIN	Wavetek	AWSC
Data					
	VCO InGaP HBT Voltage controlled oscillator	V	X	X	X
	0.5 μm pHEMT Switch RF switch	V	V	Licensed from GCS, USA	Proprietary and licensed from GCS, USA
	0.15/0.25/0.5 μm pHEMT PA/LNA base station and RF infrastructure equipment, RF switch, and phase shifter	V	V	V	V
	0.25/0.5 μm HFET Base station and RF infrastructure equipment High Linearity Power Amplifiers	V	V	X	X
	0.15/0.25/0.5 μm GaN HEMT/FET Base station and RF infrastructure equipment	V	V	X	X
	InP HBT Optical communication 40/100/400 Gbps Transimpedance amplifier (TIA), Laser Modulation, and Driver Amplifier	V	X	X	X
	BAW filter	V	X	X	X
	GaN HEMT High-voltage, high-power amplifier 4G, 5G base stations, satellite communication, national defense industries	V	V	X	X

Source of information: The Company has compiled information from various company websites, financial reports and presentations, etc.

The Company's technology is proprietary and advanced with a focus on the niche market of RF wireless communication base stations and basic equipment devices. Compared to the business operations of Win Semiconductors Corp. and Advanced Wireless Semiconductor Company that are mainly aiming at the mass production of the standardized mobile phone power amplifiers (PA), WLAN PA, and RF Switch, the Company's production capacity is relatively smaller than Taiwanese peers. The Company has adjusted the product strategy and reserved production capacity for power amplifiers, voltage-controlled oscillators, and other devices necessary for base stations and RF infrastructure equipment that have higher unit prices with higher device characteristics required. On the other hand, the Company has the technologies that are used in manufacturing power amplifiers (PA) and radio frequency switches (Switch) for mobile phones licensed to other manufacturers in the industry for the purpose of having such standardized products with lower unit prices manufactured by the licensees with royalties collected. In addition, the Company currently carries out relevant strategic cooperation plans that allows the strategic partners to provide wafer foundry services in order to combine the Company's technical resources for the sake of expanding production capacity of the fabs and customer sources. In terms of voltage-controlled oscillators, the Company's HBT technology contains the lowest



phase noise in the world with a very high market share cornered.

## (2) Optoelectronic device wafer foundry

There are various types of optoelectronic devices with different designs offered by each manufacturer. In addition, a different design entails a different manufacturing process; therefore, a standard process like the one for GaAs RF device wafer foundry is none existence for optoelectronic device wafer foundry. Therefore, many companies believe that it is important for them to have a fab of their own. However, a self-owned fab is costly. A long-term loss is inevitable without the support of profits generated from the product lines. Therefore, it is necessary to seek other sources of profit, such as, wafer foundry or transforming the fab into a fabless design house. Currently, the silicon and GaAs wafer foundry industry has already taken shape, but the optoelectronic device wafer foundry industry has just begun. The vigorous development of the optical communication industry and the massive consumer application have caused the demand for optoelectronic devices to go up and the fabless design houses to emerge. Therefore, the optoelectronic device wafer foundry will follow the footstep of the silicon and GaAs wafer foundry industry by then. However, optoelectronic device fabs must produce more price-competitive products than IDMs, otherwise the foundry business model will not work.

The optoelectronic device semiconductor factories in the world almost all manufacture optoelectronic device only; however, the market size of optoelectronic device is not as large as GaAs RF devices; therefore, it is difficult to reach the economies of scale, resulting in a high manufacturing cost. The Company has a relatively high production capacity of RF and optoelectronic device, which gives the Company a competitive advantage over other pure optoelectronic device manufacturers.

## (3) KGD-brand optoelectronic devices

The optoelectronic device semiconductor factories in the world almost all manufacturing optoelectronic device only; however, the market size of optoelectronic device is not as large as GaAs RF devices; therefore, it is difficult to reach the economies of scale, resulting in a high manufacturing cost. The Company has a relatively high production capacity of RF and optoelectronic device, which gives the Company a competitive advantage over other pure optoelectronic device manufacturers. In addition, the Company can produce RF and comprehensive value-added optoelectronic device simultaneously with high yield rate and stable quality maintained, which is another competitive advantage of the Company.

### (III) Technology and R&D Overview

1. Research and development expenses invested in the most recent year and as of the annual report publication date

Unit: NT\$ Thousands

Item \ Year	2022 (Note 1)	2023Q1 (Note 2)
R&D expense	175,008	55,085
Operating income	1,333,810	270,481
Ratio of R&D expense to operating income	13.12%	20.37%

Note 1: The consolidated financial statements audited and certified by the independent auditors.

Note 2: It is the uncertified financial data of the Company.

2. Products successfully developed in the most recent year and as of the annual report publication date

Year	Product/Technology Name
2022	0.1um low-noise pHEMT
2022	Wideband varicap diode applied in 5G mmWave and satellite communication phase array.
2022	Application in the 56G Baud PAM4 (400Gb/s) of the Data Center.
2022	Application in wideband Sub-6 GHz, 5G, WiFi 6, 6E, 7, and Gen-2 Baw of filters.
2022	Application in Gen-2 GaN Hemet of mmWave and high-power amplifier.
2022	Application in GaN/Si HEMT of high-power MMIC.
2022	Application in ultra-high power GaN/SiC HEMT.
2022	Application in the Wide Tuning Range Varactor in mmWave phased array.

### (V) Long-term and short-term business development plans

1. Short-term plans

#### A. Marketing strategy

- a. Maintain product yield rate and quality stability for major international Integrated Device Manufacturers (IDM), and seek further improvements.
- b. Actively and progressively develop new product lines with existing customers, and cooperate with customers to develop next-generation materials and valued-added new process technologies in order to meet the new communication standards of the industry, and to further grasp market trends and key process technology development.
- c. Continue to enhance information flow and technology exchange with customers.
- d. Expand the licensing of existing intellectual property rights, extend product life, and strive for higher gross profit.

#### B. Production strategy

- a. The ISO9001 and AS9100 verification is completed; the TQM (Total Quality Management) standard is implemented, and a complete hardware quality management system is established.
- b. Enhance the management and training of production technicians to improve production efficiency, product yield rate, and quality stability.
- c. Improve the technology and yield rate of the process through R&D and innovation

in order to increase productivity efficiency and reduce manufacturing costs.

- d. Apply process standardization and simplification to improve production yield rate, efficiency, and cost.
- e. Transfer the GaN/Si process to the related 6-inch fab for the mass production of sub-6GHz 5G base stations and mobile phones.
- f. Transfer BAW filter process technology to the affiliated 6-inch fab for mass production.

### C. Technology development

- a. Actively improve the yield rate and stable quality of the existing mass production process, and meet customers' product specifications and testing requirements.
- b. Enhance technical exchanges with up-stream manufacturers to stabilize technology development and production process quality. The basic characteristics of compound semiconductor devices are mostly determined during epitaxial growth; therefore, the success of key process technology relies on whether the up-stream epitaxial manufacturers can realize the Company's epitaxial (Epi) structure design, and cooperate with the Company in quality, supply capacity, cost, delivery, etc. Therefore, it is necessary to continuously enhance technical exchanges with up-stream manufacturers and establish a strategic cooperative relationship.
- c. Enhance the recruitment of talents to improve the quality and quantity of technology development.
- d. Actively seek strategies to reduce the costs of the existing mass production process.
- e. Base on the existing process technologies of Heterojunction Bipolar Transistor (HBT) and pseudomorphic High Electron Mobility Transistor (pHEMT) to develop new processes continuously in response to customer needs. Especially, pHEMT will be developed towards 0.15um or smaller gate length to facilitate the development of higher frequency products. Heterojunction Bipolar Transistor (HBT) will be used on the existing power amplifiers and VCO; also, the GaAs Super HBT will be used on mmWave devices. In addition, the Company's InP HBT process can reach the world's fastest commercial cut-off frequency, 330GHz.
- f. For higher-speed optical fibers (25G, 100G, 400G, 800G, & 1600G), base on InP materials to develop the process needed for optical fiber devices (PD, lasers, and TIA amplifiers) and optical integrated circuits for the needs of customers.
- g. Refine the existing GaN technology and cost continuously, and move towards 0.15um or smaller process to expand the product application range.
- h. Actively develop transistor component design and process to be used for 5G mobile phones and base stations.
- i. Develop mesa type APD application to be used for 10Gbps and higher-speed transmission products.
- j. Develop Backside illuminated InGaAs PIN PD with microlens for 25Gbps/ 100Gbps/ 200Gbps/ 400Gbps/ 800Gbps/ 1600Gbps and higher-speed transmission products.

- k. Develop custom-made GaAs laser wafer process and high-power laser for the use of infrared commercial quick cooking oven.
- l. Develop custom-made 25Gbps PD/TIA wafer process: PIN PD/HBT integrated process.
- m. Develop custom-made Electro-absorption Modulated Laser (EML) wafer process.
- n. Start the foundry production of 0.4um and 0.25um GaN/SiC and GaN/Si.
- o. Complete 0.25um GaN/Si process verification and customer product trial production.
- p. Assist customers to complete product verification with 0.15um GaN/SiC process.
- q. Assist customers to complete InP HBT product verification.
- r. Develop high-performance GaAs Schottky varactor diodes for Tuning-Range Phase Shifter and other applications.
- s. Develop 0.1/0.15um GaN HEMT process for mmW 5G base stations and mobile phone power amplifiers.
- t. Develop next-generation BAW filter process technology.

#### D. Overall business management

- a. Actively enhance the integrity of the Company's overall operating organization and human resources to meet the needs of the Company's growth.
- b. Enhance employee education and training and welfare policies to improve employee loyalty.
- c. Substantiate internal control management system and company discipline, and ensure stable product quality and operation efficiency.
- d. Actively reduce costs and improve production capacity utilization.
- e. Actively support strategic joint ventures and accelerate the mass production schedule.

## 2. Long term plan

### A. Marketing strategy

- a. Actively enhance R&D and launch KGD-brand optical communication devices (such as, APDs, Edge Emitting Lasers, and VCSEL).
- b. Establish strategic alliances with customers and up-stream and down-stream manufacturers to facilitate vertical integration of related industries in order to corner a higher market share.
- c. Actively strive for foundry businesses from international IDM.
- d. Actively seek objects for strategic cooperation or merger in order to enhance the Company's competitiveness and profitability.
- e. Develop new business models, such as, advanced process/product design turnkey services.
- f. Continue to actively enhance the strategic partnership with existing fabs partners in order to provide a platform for mass production of popular items in the future.

### B. Production policy

- a. Introduce advanced ERP system to increase operation efficiency.
- b. Improve the automation of the production line and reduce unproductive on-site

operations to avoid human error, improve production efficiency, and reduce production costs.

- c. Expand the plant and manufacturing equipment in response to customer needs and business growth.

#### C. Technology development

- a. Actively develop advanced process technology that meets market demand to enhance the Company's competitiveness.
- b. Actively cooperate with major customers in strategic technology development.
- c. Actively develop new KGD-brand photoelectric devices (KGD).
- d. Expand the BAW filter founder business.
- e. Complete GaAs Super HBT and 0.15um GaN HEMT (applied to 5G devices) process verification.
- f. Complete Gen-3 InP HBT and PD-HBT Electronic Photonic IC (EPIC) process verification (applied to optical communication networks greater than 100G).
- g. Completed Gen-3 GaN/SiC HEMT and GaN/Si MMIC processes.
- h. Transfer technologies to relevant fabs to increase production yield rate.

#### D. Overall business management

- a. Refine the overall human resources policy, train and cultivate talents to meet the company's needs for business growth. The Company, in addition to establishing a good communication channel with employees, provides the employees with an environment to learn and grow in order to enhance their loyalty and cohesion, and to share long-term operational success with colleagues in order to motivate employees and reduce the risk of personnel turnover, added with the employee stock option programs and employee bonuses to attract and retain the necessary professional talents.
- b. Construct an intranet system within the company to enhance operational automation and enterprise efficiency; also, to improve customer service quality.

## II. Market, production, and sales overview

### 1. Market analysis

#### (1) The Group's main products (services) market

Unit: NT\$ Thousands

Region	2021		2022	
	Sales amount	Sales ratio	Sales amount	Sales ratio
USA	530,928	42.96%	561,755	42.12%
China	504,264	40.80%	499,788	37.47%
Taiwan	37,556	3.04%	20,789	1.56%
Others	163,133	13.20%	251,478	18.85%
Total	1,235,881	100.00%	1,333,810	100.00%

#### (2) Market share

Names of major competitors and their business or competing items:

The Company is a professional compound semiconductor wafer fab. Currently, Win Semiconductors Corp. and Advanced Wireless Semiconductor Company, both are TPEX listed companies, provide wafer foundry services. The main market for the products of Win Semiconductors Corp. and Advanced Wireless Semiconductor Company is the mass-produced standardized products, such as, mobile phone power amplifier (PA), WLAN power amplifier (PA), and RF Switch. The Company focuses on power amplifiers for base stations and RF infrastructure equipment that are with advanced component characteristics, voltage-controlled oscillators and other components, power electronics devices, and the optoelectronic device and PD chips required by the optical communication industry. In addition, the Company has the technologies that are used to manufacture mobile phone power amplifiers (PA) and RF Switch licensed to other manufacturers in this industry for them to manufacture such standardized products with royalties collected from them accordingly.

#### (3) The future market supply and demand and the growth potentials

Compound semiconductor devices are key components to the wireless communication industry and the optical communication industry. Benefiting from the continuous popularity of smart phones and tablet computers, the gradual maturity and application of 5G and future 6G mobile communication specifications, the growth of wireless communication products, such as, wireless LAN, Bluetooth application, base station expansion, satellite communication, Internet of Things, and Internet of Vehicles, and the long-term stable growth of fixed network communication due to the upgrade of optical communication technology and the promotion of government policies, the market size of the compound semiconductor industry is expected to grow continuously.

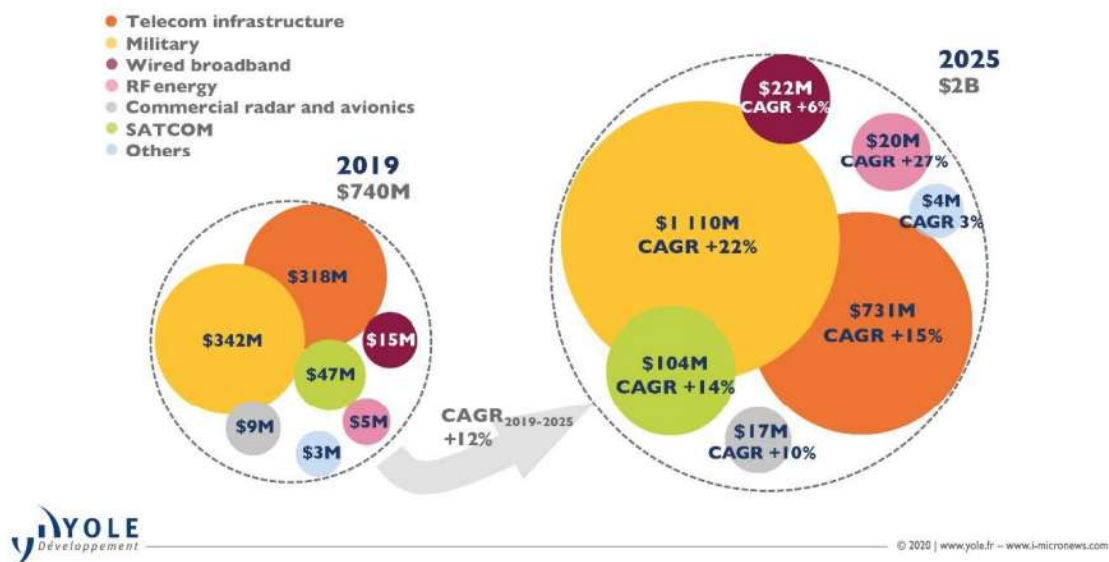
In terms of RF device foundry, the Company is engaged in the wafer foundry of RF devices that are used for base stations and basic equipment. When the global 5G mobile communication specifications and commercialization have been finalized and operated, telecom operators in the world have been investing more capitals in base stations and

equipment since 2018. It is estimated that there will be 319 million 5G users in 2022, and will eventually reach the record high of 1.217 billion users worldwide in 2025. The 5G communications will grow significantly in next 4~5 years. In addition, according to the IEK Consulting report of the Industrial Technology Research Institute, the overall global 5G market size is expected to grow from US\$4.283 billion in 2019 to US\$230.264 billion in 2023, representing a compound annual growth rate of 171%. The Company has the opportunity to grow in the field of 5G and future 6G mobile communications. Therefore, there is room for the Company to grow in the RF devices foundry for the use of base stations and basic equipment.

In addition, in terms of RF device foundry, in addition to power amplifiers, filters are used for noise filtering, signal interference suppression, frequency selection, and ensuring that signals do not interfere with each other in transmission at different frequencies. The market size mainly relies on high-frequency communication that is with increasing demand for BAW. GaN RF devices have begun to be used after GaAs. As shown in the chart below, according to Yole’s forecast. GaN RF devices will grow from US\$740 million in 2019 to \$2 billion in 2025.

## 2019-2025 packaged GaN RF device market forecast - Split by application

(Source: GaN RF Market: Applications, Players, Technology, and Substrates 2020 report, Yole Développement, 2020)



Data sources: Yole (2020)

Win Semiconductors Corp. and Advanced Wireless Semiconductor Company, both are TWSE/TPEX listed companies, provide wafer foundry services. However, the main market for the products of Win Semiconductors Corp. and Advanced Wireless Semiconductor Company is the mass-produced standardized products, such as, mobile phone power amplifier (PA), WLAN power amplifier (PA), and RF Switch. The Company focuses on power amplifiers for base stations and RF infrastructure equipment that are with advanced

component characteristics, voltage-controlled oscillators and other components, power electronics devices, and the optoelectronic device and PD chips required by the optical communication industry. For example, the 4G multi-mode and multi-frequency mobile phones needs 5~7 PA chips. According to the estimation of Strategy Analytics, 5G mobile phone will need as many as 16 PA chips and 40 BAW filters. Due to the upgrade of 5G specifications, if smartphones continue to grow at the current penetration rate, the infrastructure of mobile communications will be expanded continuously. Moreover, since IDM will no longer expand production capacity, the RF device wafer foundry business is expected to grow without doubt.

In terms of optical communication industry, it includes solutions that integrate optical fiber, xDSL, LTE, Carrier WiFi, and other fixed network, and mobile broadband technologies to achieve high-quality entertainment experience and Internet of Things applications. The optoelectronic device wafer foundry industry has just begun to take a baby step in business development due to the complexity of optoelectronic device design and technical difficulty. Most of the optoelectronic device wafer market is dominated by IDM. Many countries in the world have begun to promote high-quality home audio and video services to welcome the arrival of the Metaverse. The focus is on whether the 4K/8K/AR/VR industry can enter consumers' living rooms continuously, which is currently blocked by the challenge of how to improve the bandwidth of the home; therefore, the 4K/8K/AR/VR industry had made it necessary to have the home network bandwidth upgraded, and the broadband upgrade will be the driving force for the continuous growth of the optical communication industry in the future. According to the changes in the global communication equipment and service market scale, the demand for network data traffic is expected to grow significantly, the cloud computing is expected to emerge, the development of the Internet of Things and the Internet of Vehicles is expected to accelerate, which grant the optical communication industry an opportunity to grow in the future. In addition, rapid development is also taking place in electric vehicles, automotive radar, and wearable devices, which will simultaneously drive the high demand for optoelectronic components.

#### (4) Competition advantage

##### A. Broad and deep technical foundation and advanced high-performance technology

The Company has accumulated years of experience since its incorporation with a wide range of devices and process technologies built up, countless advanced and high-performance devices and process technologies developed for mass production thereafter, and global valuable customers solicited as a result; furthermore, the Company has secured a dominant position in global market for some products, such as Monolithic Voltage Control Oscillator. The Company has utilized these extensive devices and process technologies to rapidly develop the group's process and device technology, and develop custom-made advanced devices and process technology for customers.

The Company's process technology is sufficient to provide photoelectric device PD chips, covering from low data transmission speed (155Mbps) to high data transmission



speed (200 Gbps/400Gbps/800Gbps/1600Gbps). In addition to low dark current, it can also achieve high responsivity. Furthermore, the Company provides not only single PD chip, but also array (Array1x4, 1x8, 1x12) PD chip. The Company also develops and mass-produces Active Optical Cables (AOC) for consumer electronics and data centers including Google and Microsoft, the PD, Edge Emitting Lasers, and VCSEL chips of optical fiber technology to meet the needs of all customers, which gives the Company a competitive advantage over other pure optoelectronic device manufacturers.

In addition, the Company has reached and developed BAW filter process technology for years with patents obtained; also, the Company has provided customers with BAW filter foundry services.

#### B. Experienced team

The Company's President and CEO, Chief Technology Officer, Senior VP of Sales and Marketing, and VP of Operations have years of experience in management and a thorough understanding of the overall market dynamics. In addition, the technical team has the ability to develop new technologies in-house and capable of grasping the key technologies of products that enable the Company to maintain competitiveness in the fields of GaAs, optoelectronic devices, and process technologies. In addition, the Company has employees who have accumulated years of technology and experience in related fields to help build up the Company's profound devices and process technology strength and innovation capabilities, which is evidenced by the advanced and high-performance devices and process technologies owned by the Company.

#### C. Strong application and technology and service quality

The Company has an experienced technical service team to provide customers with technical and product application services. The technical service team can help shorten the time of having customers' products ready for mass production effectively, help customers solve problems, and establish long-term cooperative relations with customers with better service quality provided. In addition, the Company has employees who have accumulated years of technology and experience in related fields to help build up the Company's profound component and process technology strength and innovation capabilities, which is evidenced by the advanced and high-performance devices and process technologies owned by the Company.

#### D. Flexible and elastic production capacity planning

The Company is mainly engaged in the production of 4-inch wafers and is currently focusing on niche products, including RF, optoelectronics, and other products with special applications. Comparing with the standardized products, such as, mobile phone power amplifiers (PA), the wafer size of such products is relatively small, and 4-inch wafers are the sweet spot of capacity of scale because small and medium production lots are not suitable for a mass production in a 6-inch fabs. A 4-inch wafer is very competitive in optoelectronic devices and other special applications, because the aforementioned products do not require a large quantity of wafers; therefore, the 4-inch production for

only optoelectronic device is not practical in the sense of economies of scale. Therefore, many optoelectronics manufacturers are still operating 2-inch or 3-inch wafer production, in other words, the possibility of operating a 4-inch wafer production is low. However, due to the combined fabrication of RF devices, optoelectronic devices, and other wafers with special application, the Company's production can achieve the economies of scale for the amortization of fixed costs; therefore, the Company is more cost-competitive than optoelectronic peers.

#### E. High yield rate and stable quality

The manufacturing process of RF devices is more complex than that of optoelectronic devices. In terms of the number of masks, RF devices contain 16-layer masks, while optoelectronic devices contain at least 6-layer masks or more than 20 masks. The Company basing on years of experience in RF device wafer foundry is able to make optoelectronic wafer production more efficient. In addition, the Company owns a complete set of equipment capable of producing RF devices and optoelectronic devices at the same time. The optoelectronic devices and other high value-added products are produced in the factory suitable for mass production with high yield rate and stable quality secured that helps enhance the Company's competitive advantages.

### (5) Advantages and disadvantages of the development prospect, and countermeasures

#### A. Advantages

##### a. A growing industry

Compound semiconductor devices, such as, GaAs, are key components in the wireless and optical communication industries. Due to the rapid development of the communication industry and the trend of light, thin, short, small, and low power consumption, communication devices have become an irreplaceable key part of mobile phones and WLAN in recent years. The market is expected to grow continuously in the future along with the high demand in 5G/6G market. At the same time, the prevailing of ultra-high frequency communication, such as, optical communication and satellite communication, electronic vehicle, automotive radar, and wearable devices, has a strong demand for ultra-high frequency devices, and such process technology often requires a special production process owned by the Company, which is to the advantage of the Company, one of the advantages.

##### b. Serve world-class customers

The Company has managed to accumulated R&D capability through a strong R&D team; therefore, the Company is capable of having the proprietary technologies or customer's technologies innovated continuously in the shortest time possible in order to help make customers' products with better characteristics or lower cost, to firmly retain customers' purchase orders, and to aim at the customer's next-generation products. The Company has a long-term strategic partnership developed with key customers to collaborate on pioneering products and process technologies.

In terms of RF device wafer foundry, the Company has managed to serve the

world-class customers, renowned customers, with the Company's excellent R&D strength and process technology. These customer groups continue to penetrate the field of RF base stations and equipment outside the United States, especially in China and India. The enhancement of infrastructure and the business opportunities resulted from the adoption of new communication technologies are all to the advantage of the Company for future development.

In terms of optoelectronic wafer foundry, the Company has been in contact with several potential customers that could become the world-class customers of the Company in the future. The expected growth of optical communication industry in the future, and the advantage of excellent manufacturing technology, research and development capabilities, economies of scale, and competitive cost are to the advantage of the Company in soliciting Fabless Design House as customers, which is expected to have a positive effect on the Company's operating income and profit.

In terms of KGD-brand optoelectronic devices, the Company's products are mass-produced for the use of domestic and foreign first-tier customers; therefore, the Company has become a strategic supplier of chips to them.

#### c. Introduction of new process technology

The Company basing on the excellent R&D and process capabilities is able to develop new process technologies in response to market needs with the market opportunities grasped for good fortune. In addition to the high-frequency process technology, the Company is about to launch a series of advanced GaAs, GaN, and BAW filter process technologies for the good of the existing customers, and for attracting more new customers in order to diversify the distribution of the Company's customer base.

#### d. Integrity of process technology and market competitiveness

In the field of RF devices, for pHEMT and GaN, the Company, in addition to the existing 0.5 $\mu$ m and 0.25 $\mu$ m technologies, further develops a higher frequency 0.1 $\mu$ m technology. Therefore, the Company has a complete series of process technologies for the choice of customers and for enhancing the Company's competitiveness in the market.

In terms of KGD-brand optoelectronic devices, in addition to the existing 155 Mbps, 2.5 Gbps, 10 Gbps, 25 Gbps, 40 Gbps, 100 Gbps, 200 Gbps, 400 Gbps, 800 Gbps PD product lines and 2.5Gbps Edge-emitting lasers, the Company is developing PD with higher transmission speed (1600Gbps), and other key components, such as, 25 Gbps APD, 25 Gbps VCSEL, and 10 Gbps/25 Gbps Edge-emitting laser in order to provide Complete Optical Chipset.

#### 6-inch Wafer Investment

The Company's investment in two 6-inch wafer foundries will speed up the Company's development in radio frequency and optoelectronics industries.

### B. Disadvantages and countermeasures

#### a. Product prices dropped

In general, semiconductor devices begin to face price-cut pressure after reaching a certain level of demand, so are RF devices.

Countermeasures:

- (a) Enhance process standardization and simplification continuously.
- (b) Enhance production automation to improve production yield rate and efficiency, and to reduce costs.
- (c) Improve the process technology and yield rate through R&D and innovation to increase production efficiency and to reduce production cost.
- (d) If the production cost structure cannot meet the price expectation of customers, evaluate the possibility of having the process technology and customers' products transferred to other manufacturers in this industry and/or joint venture 6-inch fabs in order to cultivate outsourcing capacity and increase royalty income.

**b. High labor cost**

The Company's main operation is located in California, USA. It is necessary to innovate constantly and introduce new process technologies in order to maintain competitiveness. A recruitment of senior engineers is a must; therefore, personnel cost is higher than the operation in Asian countries.

Countermeasures:

- (a) The Company will continue to introduce new value-added process technologies and develop related supporting services to increase economic output and profit of each piece of wafer in order to respond to this challenge.
- (b) The Company has the product structure gradually adjusted with a focus on manufacturing customized products with higher margin, including high-end base station power amplifiers (PA) and Photodiodes (PD), and focusing on niche markets.

**c. Production capacity limit**

Currently, the Company is mainly focusing on the production of 4-inch wafers with limited production capacity. Therefore, customer products currently under development may face capacity shortages when they are ready for mass production in the future.

Countermeasures:

- (a) Technology transfer and order transfer to other GaAs fabs

If the production cost structure cannot meet the price expectation of customers, evaluate the possibility of having the process technology and customers' products transferred to other manufacturers in this industry and/or joint venture 6-inch fabs in order to cultivate outsourcing capacity and increase royalty income.

- (b) Convert 4-inch wafers to 6-inch wafers

The Company under the precondition of protecting the interests of

shareholders and the development of the Group with the relevant factors evaluated, intends to acquire 6-inch production capacity by buying a factory or cooperating with other factories to produce 6-inch RF or optoelectronic products in the future; also, reserve part of the 4-inch production capacity for the production of optoelectronics and other products with special applications.

2. Intended use and production processes of the main products

(1) Intended use of the main products:

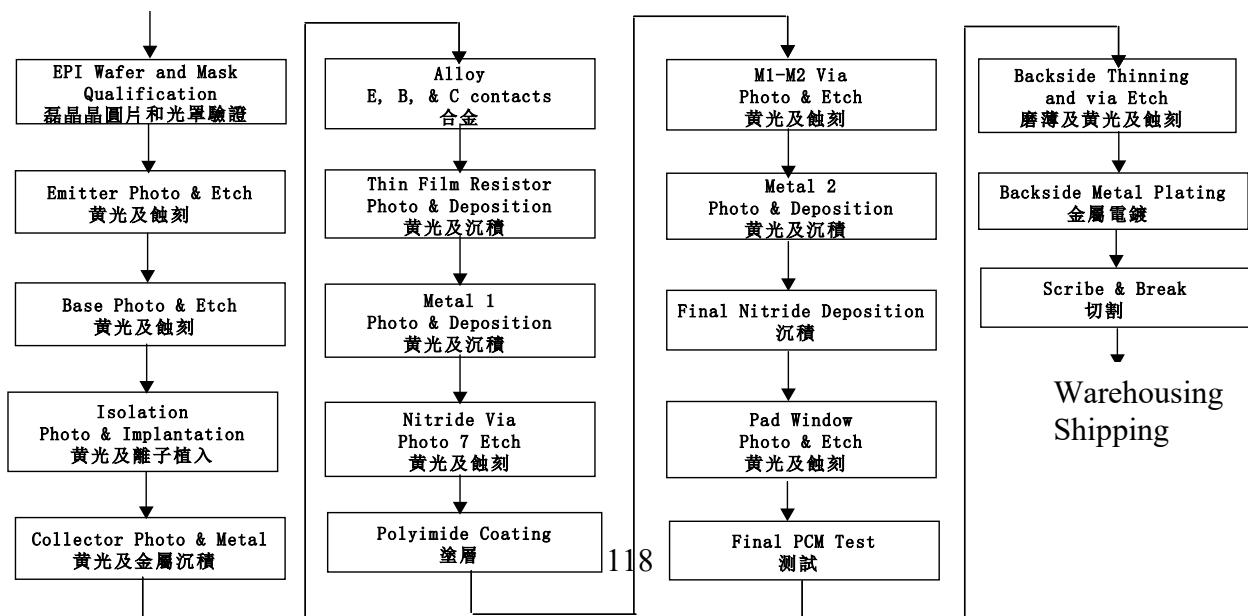
Technical name	Process name	Intended Use
GaAs HBT	Power HBT	Power Amplifiers required for Handset/WLAN/WiMAX Mobile Power Amplifier, and Infrastructure Power Amplifier
	HBV and HBT	RF Infrastructure High Power Amplifier
	VCO and HBT	Low Phase Noise VCOs for RF Infrastructure
GaAs pHEMT	0.5 $\mu\text{m}$ Switch pHEMT	Switches required for Handset/WLAN/WiMAX RF Switches
	0.5 $\mu\text{m}$ Power pHEMT	Power Amplifiers, Low Noise Amplifiers, and Mixer and Switch up to 20 GHz required for RF infrastructure and satellite and national defense communications
	0.25 $\mu\text{m}$ Power pHEMT	Power Amplifier, Low Noise Amplifier, and Mixer and Switch up to 40 GHz required for RF infrastructure and satellite and national defense communications
	0.15 $\mu\text{m}$ Power pHEMT	Power Amplifier, Low Noise Amplifier, and Mixer and Switch up to 60 GHz required for RF infrastructure and satellite and national defense communications
	0.5/0.25 $\mu\text{m}$ HFET	High Linearity Power Amplifiers required for RF Infrastructure
	0.5 $\mu\text{m}$ E/D-mod pHEMT	For Integrated Multifunction ICs
	0.25 $\mu\text{m}$ Super Low Noise E/D-mode pHEMT	Super Low Noise Amplifier required for 802.11ac, GPS, and satellite TV VSAT receivers
RF Passive	High-Q RLC on GaAs with large via	For RF filter and matching/bias network
InP DHBT	Power InP HBT 100 ft ~ 100 GHz, $BV_{ceo} > 11V$	5G mmWave power amplifier for high linearity and high performance
	DHBT3 300 ft ~ 300 GHz cutoff frequency	For 40 Gb/s-100 Gb/s Trans-Impedance Amplifier (TIA), Laser Modulator Driver Amplifier, and High-Speed Mixed-Signal Ics in optical communication
Gallium Nitride High Electron Mobility Transistor	0.15/0.25/0.5 $\mu\text{m}$ HEMT	GaN/SiC HEMTs are used in high-efficiency power amplifiers for RF infrastructure, radar, satellite communications, and military systems. GaN/Si HEMTs are used in high power amplifiers for mobile phones.
	0.5/0.25 $\mu\text{m}$ GaN/SiC HEMTs	High Power and High Voltage Power Amplifier for RF infrastructure and satellites up to 20/60 Ghz
Bulk Acoustic Wave (BAW) Resonator	Semiconductor Monolithic Acoustic Resonator Technology (SMART)	High-efficiency RF filters for 4G and 5G mobile phones
Short wavelength PIN PD	GaAs PIN PD	850nm nanophotodiodes and photodiode arrays that can be used for optical communications up to 10Gb/s to 100Gb/s.
Long wavelength PIN PD	InGaAs PIN PD	1310 and 1550 nanophotodiodes and photodiode arrays required for optical fiber communications up to 10Gb/s to 400Gb/s
Photodiode (PD)	InGaAs Zn-diffused PIN PD	Front or edge Laser Monitor PD (MPD)

Technical name	Process name	Intended Use
Long wavelength avalanche photodiode (APD)	InGaAs Avalanche Photodiodes	1310nm/1550nm long wavelength avalanche photodiode (APD) that can be used for 1-25 Gb/s optical communication
Vertical Cavity Surface Emitting Laser (VCSEL)	4" GaAs VCSEL	859nm Vertical Cavity Surface Emitting Laser (VCSEL) that can be used for 1-25 Gb/s optical communication
Vertical Cavity Surface Emitting Laser (VCSEL)	4" & 6" GaAs VCSEL	3D sensing, camera and sensor, LiDAR, atomic clock, etc. Used in consumer electronics, medical, automotive, industrial, and defense industries
External Cavity VCSEL	4-inch backside-emitting laser	Projectors for high-end movie theaters
InP Edge-emitting Laser	InP Ridge Waveguide edge-emitting laser	1310nm wavelength laser that can be used for PON optical communication 1-10 Gb/s
InP Photonic Integrated Circuit PIC	4" Indium Phosphide Photoelectric Component Integration Process	100-400 Gb/s integrated coherent receiver and DM, EAM lasers
InP/SOI Photonic Integrated Circuit, PIC	6" InP/SOI Heterogeneous Photoelectric Component Integration Process	100-400 Gb/s PIC with photodiode, SOA, laser, and EAM
Near Infrared Photodiode Focal Plane Array	Indium Gallium Arsenide (InGaAs) PIN photodiode trenched 2D array	For 3D LiDAR self-driving car and infrared 1280x1024 high-resolution image array
Geiger Mode APD	InGaAs Geiger mode trenched APD linear and 2D array	For 3D LiDAR self-driving car
GaAs QWIP Longwave Infrared Focal Plane Array	GaAs/AlGaAs Quantum Well Infrared Photodiode Focal Plane Array	For 8-12um wavelength infrared imaging applications
GaAs Laser	High Power GaAs Laser	Commercial cooking appliances

(2) Production process:

A typical GaAs wafer foundry flowchart (HBT process) is shown below.

Epitaxial wafers and masks



### 3. Availability of main raw materials

Epitaxy Wafer is the main raw material used by the Company. Since the basic characteristics of gallium arsenide (GaAs) and indium phosphide (InP) are mostly determined during the epitaxial growth, epitaxy is the most important material of GaAs and InP. Therefore, the supplier of epitaxy with reliable quality is ideal for long-term cooperation. The Company since the incorporation has striven to main a good cooperative relationship with epitaxy suppliers. The procurement and supply of raw materials is smooth without any incident of supply shortage. The Company has established long-term strategic alliances with major suppliers to enhance the close cooperation in order to further secure the delivery time, quality stability, and cost of the supply source.

### 4. List of major suppliers and customers

(1) Names of suppliers who accounted for more than 10% of the total annual purchases in any of the last two years, the purchase amounts and ratios, and the reasons for any increase or decrease occurred:

Unit: NT\$ Thousands

Item	2021				2022			
	Name	Amount	Ratio to net purchase amount (%)	Relation with the issuer	Name	Amount	Ratio to net purchase amount (%)	Relation with the issuer
1	Company V	91,724	33.90	None	Company V	102,423	28.10	None
2	Company A	39,361	14.55	None	Company A	87,465	24.00	None
3	Company D	35,948	13.29	None	Company D	41,792	11.47	None
4	Company N	28,511	10.54	None	Company N	39,221	10.76	None
5	Others	75,023	27.72	—	Others	93,586	25.67	—
	Net purchase amount	270,567	100.00	—	Net purchase amount	364,487	100.00	—

Reason for increase or decrease:

- The product specification provided by Company A meets the production requirement of the Company due to an increase in foundry demand, hence increasing the purchases.
  - The rising incoming material costs and increased inbound quantity needed for production, Company N's purchase amount increased compared with the same period last year.
- (2) Names of customers who accounted for more than 10% of the total annual sales in any of the last two years, the sales amounts and ratios, and the reasons for any increase or decrease occurred:

Unit: NT\$ Thousands; %

Item	2021				2022			
	Name	Amount	Ratio to net sales amount (%)	Relation with the issuer	Name	Amount	Ratio to net sales amount (%)	Relation with the issuer
1	Company E	336,002	27.19	None	Company E	349,511	26.21	None



Item	2021				2022			
	Name	Amount	Ratio to net sales amount (%)	Relation with the issuer	Name	Amount	Ratio to net sales amount (%)	Relation with the issuer
2	Company O	126,745	10.26	None	Company M	191,523	14.36	None
3	Company M	123,296	9.98	None	Company O	110,291	8.27	None
4	Others	649,838	52.57	—	Others	682,485	51.16	—
	Net sales amount	1,235,881	100.00	—	Net sales amount	1,333,810	100.00	—

Reason for increase or decrease:

1. Company M's demand for related radio frequency products, and hence the production investment is increased with corresponding income increase in the foundry.
5. The production volume and amount of the last two years

Unit: Pieces; NT\$ Thousands

Main Products	2021			2022		
	Production capacity	Production volume	Production amount	Production capacity	Production volume	Production amount
(RF Infrastructure)	18,000 (Note)	4,655	882,642	18,000 (Note)	5,439	1,076,323
Optoelectronics			—			—
Technical service income		—	504		—	
Total	18,000	4,655	883,146	18,000	5,439	1,076,323

Note: The production capacity is converted to the production capacity of 4" HBT equivalent process. Actual production capacity may vary depending on product mix.

6. The sales volume and amount of the last two years

Unit: Pieces; NT\$ Thousands

Main Products	2021				2022			
	Domestic sales		Exports		Domestic sales		Exports	
	Volume	Amount	Volume	Amount	Volume	Amount	Volume	Amount
RF Infrastructure	—	—	5,806	1,229,509	—	—	5,303	1,333,176
Optoelectronics	—	—			—	—		
Technical service income	—	—	—	6,372	—	—	—	634
Total	—	—	5,806	1,235,881	—	—	5,303	1,333,810

Note: Export refers to the sales outside the Cayman Islands.

### III. Number of employees, average years of service, average age, and distribution of academic qualifications in the last two years and as of the annual report publication date

Year		2021	2022	As of April 8, 2023
Number of employees	Indirect employee	64	66	68
	Direct employee	123	122	120
	Total	187	188	188
Average age		50.72	49.32	49.16
Average seniority		10.05	9.51	9.56
Education distribution ratio (%)	Ph.D.	11.23	10.11	11.17
	Master	10.16	11.70	10.64
	Bachelor	23.53	20.75	20.75
	High school and below	55.08	57.45	57.45

#### IV. Information on environmental protection expenditure

Losses arising from environmental pollution in the most recent year and as of the annual report publication date (including compensations and the violation of environmental protection laws and regulations as a result of an environmental audit, the date of the punishment, the Disciplinary Act No., the provisions of the laws and regulations violated, the content of violation against laws and regulations, and the content of punishment); disclose the estimated amount that may occur at present and in the future, and countermeasures; the fact that it cannot be reasonably estimated, if that is the case, should be explained in details: None

#### V. Labor relations

1. (I) The Company's employee welfare measures, advanced study, training, retirement systems, and their implementation; also, the labor-management agreements, and other protection measures for employees' rights and interests:

##### (1) Employee welfare measures

The Company's subsidiary in the United States has employee welfare measures handled in accordance with the US Social Security Program Rules and the US Labor Law; also, provided employees with Health Insurance, Workers' Compensation Insurance, and Retirement Plan-401K to protect employees' well-being.

The employees of the subsidiaries in Taiwan are entitled to labor insurance, national health insurance, and group insurance for the protection of their well-being.

##### (2) Employee advanced study and training

The Company implements various training courses according to the needs of the work, including internal and external training. New recruits are required to receive general safety and health education and professional departmental job training after their reporting to duty. In addition, the Company will assign employees to participate in training arranged by external organizations as needed in order to provide employees with a complete training and advanced study channel.

##### (3) Employee retirement system and its implementation

The Company's subsidiary in the United States currently pays the Social Security Tax and Medicare's Hospital Tax in accordance with the Social Security Program Rules and Medicare requirements, which is jointly paid by the employers and employees. Retired employees are entitled to social security benefits, such as, pensions, disability benefits, and federal hospital/medical insurance. The employees of the subsidiaries in Taiwan are entitled to the benefits in accordance with the Labor Pension Act and related regulations.

##### (4) Labor-management agreement and various employee rights and interests protection measures

The Company and the subsidiaries value the importance of the rights and interests of employees; therefore, the measures related to labor-management relations have been fully communicated between labor and management; moreover, employees can express their opinions openly through the convenient labor-management communication channels.

- (5) Losses arising from labor-management disputes in the most recent year and as of the annual report publication date (including compensations and the violation of the Labor Standards Act as a result of labor inspections, the date of the punishment, the Disciplinary Act No., the provisions of the laws and regulations violated, the content of violation against laws and regulations, and the content of punishment); disclose the estimated amount that may occur at present and in the future, and countermeasures; the fact that it cannot be reasonably estimated, if that is the case, should be explained in details: None

## VI. Information security management

1. (I) Describe information security risk management framework, information security policy, specific management plans, resources invested in information security management, etc.:

(1) Information security risk management framework:

The Company's Information Department is responsible for performing information security-related operations to implement relevant information security management procedures and provide an information environment for operations.

(2) Information security policy:

The Company will formulate information security policies and related information security management measures in accordance with relevant regulations, and will regularly review and update the content and propagandize them as a basis for implementing information security operations.

- A. Establish an information security organization and specify its rights and responsibilities to promote and maintain related management, execution, and inspection tasks.
- B. Formulate information security management related methods and procedures to protect the confidentiality, integrity and availability of personnel, data, systems, equipment and networks.
- C. Convene information security management meetings on a regular basis to review the latest status in internal and external risks, technology and business needs, and take corresponding measures.
- D. Regularly conduct various information security testing and audits to assess the risks of the information environment and make improvements.
- E. Deploy information security protection systems and monitoring equipment to continuously improve the security of the overall information environment and reduce the security incidence.
- F. The use of the system and data must be authorized, and the granting of access rights should be based on the minimum scope required by the business.

- G. Establish appropriate system architecture and backup mechanisms and conduct contingency exercises to strengthen the resilience of information services.
  - H. Establish response and notification procedures for information security incidents to enhance employee's ability to respond and coordinate in the face of emergencies.
  - I. Conduct information security education and training for employees, and continue to enhance employees' awareness.
  - J. In accordance with the regulations of information security and personal information protection, handle and protect the security of data and systems carefully.
- (3) Specific information security management plans and resources invested in information security management:
- A. Computer equipment and servers are equipped with relevant anti-virus software and updated in a timely manner.
  - B. Set up a network firewall
  - C. Remote connection control
  - D. Occasionally propagandize relevant information security concepts and watch out for phishing emails.
  - E. Emails are equipped with relevant screening mechanism.
2. Describe the losses arising from material information security incidents in the most recent year and as of the annual report publication date, the potential effects, and countermeasures; also, the fact that it cannot be reasonably estimated, if that is the case, should be explained in details: None

## VII. Important contracts

Nature of contract	Counterparty	Contract duration	Main contents	Restrictive clause
Technology transfer	Company F	11/22/2010 – royalty paid in full	HBT and pHEMT technology transfer	The transferred company cannot use this technology to produce RF infrastructure products - NDA
Financing contract	CTBC Bank Corp. (USA)	8/6/2015 – 8/6/2022 (Note 1)	Long-term loan contract	Set up pledge with land and factory buildings
Financing contract	CTBC Bank Corp. (USA)	4/20/2020 – 4/20/2022 (Note 2)	GCS, USA Paycheck Protection Loan	According to the contract
Financing contract	Cathay Bank (USA)	4/29/2020 – 4/29/2022 (Note 3)	D-Tech Optoelectronics Paycheck Protection Loan	According to the contract
Financing contract	Cathay Bank (USA)	2/2/2021 – 2/2/2026	D-Tech Optoelectronics Paycheck Protection Loan	According to the contract
Technology	Company S	According to the	Specific technology	According to the contract

Nature of contract	Counterparty	Contract duration	Main contents	Restrictive clause
transfer		contract	transfer	
Strategic Cooperation Agreement	EPISTAR Corporation	According to the contract	Relevant content according to the contract	According to the contract
Joint venture contract	Epistar (Changzhou) Company & other investment juristic person	According to the contract	Relevant content according to the contract	According to the contract
Cooperation agreement	SMC Cloud Limited and Wisdom Fortune Corporation Limited	According to the contract	Relevant content according to the contract	According to the contract
Acquisition agreement	Shanghai Zhougao Optoelectronics Co., Ltd. and Changzhou Galasemi Co., Ltd.	According to the contract	Changzhou Galasemi Co., Ltd., a subsidiary of the Company, was sold to Shanghai Zhougao Optoelectronics Co., Ltd. in accordance with the contract signed.	According to the contract
Capital Increase Agreement and Joint Venture Agreement	Changzhou ChemSemi Co., Ltd. and other companies	According to the contract	Relevant content according to the contract	According to the contract
Technology transfer	Shanghai Galasemi Co., Ltd.	According to the contract	Specific technology transfer	According to the contract

Note 1: The original contract period was from August 6, 2015 to August 6, 2022. Global Communication Semiconductors, LLC, a subsidiary of the Company, signed an amendment to this long-term loan contract with the bank on July 12, 2021 to adjust the loan amount and loan interest rate; also, the loan maturity date was extended to August 6, 2031.

Note 2: Global Communication Semiconductors, LLC, a subsidiary of the Company, had obtained approval from the Small Business Administration on June 9, 2021 to have the repayment of the loan waived.

Note 3: D-Tech Optoelectronics, Inc., a subsidiary of the Company, had obtained approval from the Small Business Administration on January 6, 2021 to have the repayment of the loan waived.

Note 4: D-Tech Optoelectronics, Inc., a subsidiary of the Company, had obtained approval from the Small Business Administration on April 27, 2022 to have the repayment of the loan waived.

## Six Financial overview

### I. Condensed Balance Sheet and Comprehensive Income Statement for the Last Five Years

#### (I) Condensed Balance Sheet-Consolidated

Unit: NT\$ Thousands

Item		Financial Information for Most Recent 5 Fiscal years (Note 1)				
		2018	2019	2020	2021	2022
Current assets		2,211,359	2,593,168	1,913,321	2,390,262	1,094,020
Investments accounted for using equity method		-	-	1,013,963	1,690,553	2,446,614
Property, plant and equipment		723,641	775,808	695,634	575,485	695,667
Intangible assets		185,489	197,032	144,655	94,366	56,678
Other assets (Note 2)		281,795	336,991	130,502	151,328	223,935
Total assets		3,402,284	3,902,999	3,898,075	4,901,994	4,516,914
Current liabilities	Before distribution	247,308	239,494	199,821	154,908	405,580
	After distribution	353,869	285,117	199,821	154,908	405,580 (Note 3)
Noncurrent liabilities		142,191	136,397	171,158	247,846	410,612
Total liabilities	Before distribution	389,499	375,891	370,979	402,754	816,192
	After distribution	496,060	421,514	370,979	402,754	816,192 (Note 3)
Equity attributable to owners of the parent		3,002,026	3,521,317	3,527,096	4,499,240	3,700,722
Share capital		821,691	908,335	914,058	1,106,761	1,108,251
Capital surplus		1,092,635	1,447,954	1,703,520	2,937,329	2,825,143
Retained earnings	Before distribution	1,150,765	1,311,782	1,151,818	722,148	(222,913)
	After distribution	1,044,204	1,266,159	1,151,818	722,148	(222,913) (Note 3)
Other equity interest		27,805	(55,884)	(151,430)	(254,043)	(9,759)
Treasury stocks		(90,870)	(90,870)	(90,870)	(12,955)	-
Non-controlling interest		10,759	5,791	-	-	-
Total equity	Before distribution	3,012,785	3,527,108	3,527,096	4,499,240	3,700,722
	After distribution	2,906,224	3,481,485	3,527,096	4,499,240	3,700,722 (Note 3)

Note 1: The financial information has been audited and attested by CPA.

Note 2: Other assets are non-current assets net of Investments accounted for using equity method, property, plant and equipment, and intangible assets.

Note 3: The board of directors of GCS Holdings, Inc. had resolved on February 20, 2023 that no dividend distribution will be made out of 2022 retained earnings.

## (II) Condensed Comprehensive Income Statement

Unit: NT\$ Thousands, except for earnings per share in NTD

Item	Fiscal Year	Financial Information for Most Recent 5 Fiscal Years (Note)				
		2018	2019	2020	2021	2022
Operating revenue		1,952,411	1,786,334	1,481,859	1,235,881	1,333,810
Gross profit		897,712	809,931	613,734	345,057	314,929
Operating profit (loss)		387,240	301,750	187,530	(30,814)	(137,333)
Non-operating income and expenses		3,774	19,871	(289,532)	(356,396)	(814,368)
(Loss) profit before income tax		391,014	321,621	(102,002)	(387,210)	(951,701)
(Loss) profit from continuing operations for the year		317,589	262,996	(113,916)	(378,497)	(939,717)
Loss from discontinued unit		-	-	-	-	-
Net (loss) income for the year		317,589	262,996	(113,916)	(378,497)	(939,717)
Other comprehensive (loss) income for the year(after tax)		78,641	(85,434)	(98,971)	(109,228)	246,836
Total comprehensive (loss) income for the year		396,230	177,562	(212,887)	(487,725)	(692,881)
(Loss) profit attributable to owners of the parent		320,302	267,578	(113,994)	(378,497)	(939,717)
(Loss) profit attributable to non-controlling interest		(2,713)	(4,582)	78	-	-
Total comprehensive (loss) income attributable to owners of the parent		398,771	182,530	(212,966)	(487,725)	(692,881)
Total comprehensive (loss) income attributable to non-controlling interest		(2,541)	(4,968)	79	-	-
(Losses) earnings per share (in dollars)		3.96	3.00	(1.28)	(4.20)	(8.53)

Note : The financial information has been audited and attested by CPA.

## (III) The name and audit opinion of the CPA for the past five fiscal years

## 1. The name and audit opinion of the CPA for the past five years

Year	CPA	CPA Firm	Audit Opinion
2018	Mr. Li, Tien-Yi and Mr. Hsieh, Chih-Cheng	PwC Taiwan	Unqualified opinion
2019	Mr. Li, Tien-Yi and Mr. Hsieh, Chih-Cheng	PwC Taiwan	Unqualified opinion
2020	Ms. Cheng, Ya-Huei and Ms. Lin, Yu-Kuan	PwC Taiwan	Unqualified opinion
2021	Ms. Cheng, Ya-Huei and Ms. Lin, Yu-Kuan	PwC Taiwan	Unqualified opinion
2022	Ms. Bai, Shu-Chian and Ms. Cheng, Ya-Huei	PwC Taiwan	Unqualified opinion

## 2. If there is any change of CPA made in the last five years, the reasons for the change explained by the Company, the former and the successor CPA shall be illustrated:

Mr. Chang Chih-An and Mr. Li, Tien-Yi were the CPAs assigned to serve the Company originally. Then, Mr. Chang Chih-An was replaced by Mr. Hsieh, Chih-

Cheng in 2017 due to the internal organizational adjustment of PwC. Later on, Mr. Li, Tien-Yi and Mr. Hsieh, Chih-Cheng were replaced by Ms. Cheng, Ya-Huei and Ms. Lin, Yu-Kuan to serve as the CPAs of the Company in 2020 due to the internal organizational adjustment of PwC Taiwan. In 2022, due to further internal organizational adjustments of PwC, the CPAs were changed from Ms. Cheng, Ya-Huei and Ms. Lin, Yu-Kuan to Ms. Bai, Shu-Chian and Ms. Cheng, Ya-Huei.

## II. Financial analysis for the most recent five years

Item	Fiscal Year	Financial information for the most recent five years (Note 1)				
		2018	2019	2020	2021	2022
Financial structure (%)	Debt ratio (%)	11.45	9.63	9.52	8.22	18.07
	Long-term fund to property, plant and equipment ratio (%)	435.99	472.21	531.64	824.88	590.99
Solvency (%)	Current ratio (%)	894.17	1,082.76	957.51	1,543.02	269.74
	Quick ratio (%)	754.46	931.53	759.89	1,342.15	178.09
	Interest coverage ratio	77.12	64.39	(29.72)	(82.59)	(77.72)
Operating performance	Accounts receivable turnover (times)	7.61	6.66	5.68	6.88	6.81
	Average collection days	48	55	64	53	54
	Inventory turnover (times)	2.60	2.43	2.08	2.22	2.54
	Accounts payable turnover (times)	56.56	55.32	45.54	74.44	214.68
	Average days in sales	140	150	175	164	144
	Property, plant and equipment turnover (times)	2.74	2.38	2.01	1.94	2.09
	Total assets turnover (times)	0.61	0.48	0.37	0.28	0.28
Profitability	Return on assets (%)	10.08	7.31	(2.85)	(8.50)	(19.7)
	Return on equity (%)	11.44	8.04	(3.23)	(9.43)	(22.92)
	Ratio of income before tax to paid-in capital (%)	47.58	35.40	(11.15)	(34.98)	(85.87)
	Net Profit margin (%)	16.26	14.72	(7.68)	(30.62)	(70.45)
	(Losses) Earnings per share (NTD) (Note 2)	3.96	3.00	(1.28)	(4.20)	(8.53)
Cash flows	Cash flow ratio (%)	235.98	142.50	187.34	139.28	(16.57)
	Cash flow adequacy ratio (%)	145.92	157.29	189.53	195.80	136.26
	Cash flow re-investment ratio (%)	12.23	5.10	6.86	3.64	(1.22)
Leverage	Operation leverage	1.30	1.45	1.66	(2.85)	0.04
	Financial leverage	1.01	1.01	1.01	0.86	0.92
Please explain the causes of changes in the financial ratios in the most recent two fiscal years (with a change of more than 20%):						
<ol style="list-style-type: none"> <li>1. Debt ratio: Due to the increase in other accounts payable and long-term borrowing this year, the amount of debts increased while the total amount of assets declined. The debt ratio then rose accordingly.</li> <li>2. Long-term fund to property, plant and equipment ratio: The increase in this year's net loss caused shareholders' equity to reduce in amount while the long-term fund to property, plant and equipment ratio dropped accordingly.</li> <li>3. Current ratio: I The increase in this year's reinvestment expenditure reduces the cash and cash equivalents, and hence the current ratio dropped.</li> </ol>						



4. Quick ratio: The increase in this year's reinvestment expenditure reduces the cash and cash equivalents, resulting in a decline in the quick ratio.
5. Accounts payable turnover : The rise of cost of sales this year and the decline in the average amount of account payable led to the increase in accounts payable turnover ratio.
6. Return on assets: This year's ROA dropped due to the increase in net loss this year.
7. Return on equity: This year's ROE dropped due to the increase in net loss this year.
8. Ratio of income before tax to paid-in capital : Due to an increase in loss before income tax during the current year, this ratio has decreased compared to the previous year.
9. Net profit margin: The decrease in net profit margin compared to the previous year is due to an increase in net loss during the current year.
10. (Losses) Earnings per share: The increase in net loss during the current year has led to an increase in losses per share for the year.
11. Cash flow ratio: The increase in net cash outflow from this year's operating activities caused the cash flow ratio this year to drop.
12. Cash flow adequacy ratio: The increase in net cash outflow from this year's operating activities caused the cash flow adequacy ratio to drop compared with last year.
13. Cash flow reinvestment ratio: Due to the increase in net cash outflow from this year's operating activities, the cash flow reinvestment ratio declined compared with last year.
14. Operating leverage: Due to the negative amount of net operating income for this year, after deducting variable operating costs and expenses, furthermore, this year incurred an operating loss.

Note 1: The financial information has been audited and attested by CPAs.

Note 2: It is the diluted earnings per share after retrospective adjustment in accordance with the ratio of capital increase from earnings.

Note 3: The calculation formula of financial analysis is as follows:

1. Financial structure

(1) Debt ratio = Total liabilities/total assets

(2) Long-term fund to property, plant and equipment ratio = (Total equity + noncurrent liabilities) / net property, plant and equipment

2. Solvency

(1) Current ratio = Current assets/current liabilities

(2) Quick ratio = (Current assets - inventory - prepaid expenses) / current liabilities

(3) Interest coverage ratio = Earnings before tax and interest expenses / current interest expenses

3. Operating performance

(1) Accounts receivable (including accounts receivable and notes receivable arising from business operations) turnover (times) = Net sales / average receivables balance (including accounts receivable and notes receivable arising from business activities)

(2) Average collection days = 365/accounts receivable turnover (times)

(3) Inventory turnover (times) = Cost of goods sold / average inventory

(4) Accounts payable (including accounts payable and notes payable arising from business activities) turnover = cost of goods sold / average payables balance (including accounts payable and notes payable arising from business activities)

(5) Average days in sales = 365/inventory turnover

(6) Property, plant and equipment turnover (times) = Net sales/average net property, plant and equipment

(7) Total assets turnover (times) = Net sales / average total assets

4. Profitability

(1) Ratio of return on assets = [Net income (loss) + interest expenses × (1 - effective tax rate)] / average total assets

(2) Ratio of return on equity = Net income (loss) after tax / average total equity

(3) Ratio of income before tax to paid-in capital = Income before Tax / Paid-in Capital

(4) Net profit margin = Net income (loss) after tax / net sales

- (5) (Losses) Earnings per share = (Income or loss attributable to owners of parent – preferred stock dividends) / weighted average number of shares outstanding
5. Cash flows
- (1) Cash flow ratio = Net cash flow from operating activities / current liabilities
  - (2) Cash flow adequacy ratio = Five year sum of net cash flow from operating activities / five year sum of (capital expenditures + increase in inventory + cash dividends)
  - (3) Cash flow re-investment ratio = (Cash from operating activities - cash dividends) / (gross property, plant and equipment + long-term investments + other non-current assets + working capital)
6. Leverage
- (1) Operation leverage = (Net operating revenue - variable operating costs and expenses) / operating income.
  - (2) Financial leverage = Operating income / (operating income - interest expenses)

### III. The audit committee's report for the most recent year's financial Statement

英屬蓋曼群島商環宇通訊半導體控股股份有限公司  
GCS Holdings, Inc. (The "Company")

#### 審計委員會查核報告書

#### Audit Committee's Report

本公司董事會造具本公司中華民國 110 年營業報告書、合併財務報表及盈餘分派議案等，其中合併財務報表業經資誠聯合會計師事務所鄭雅慧會計師、林玉寬會計師查核完竣，並出具查核報告。上述營業報告書、合併財務報表及盈餘分派議案經本審計委員會查核，認為尚無不合，爰依證券交易法第十四條之四及公司法第二百一十九條之規定報告如上，敬請 鑒核。

The Board of Directors has prepared the Company's 2021 Business Report, Consolidated Financial Statements and proposal for earnings distribution. Ms. Cheng Ya-Huei and Ms. Lin Yu-Kuan, the certified public accountants of PricewaterhouseCoopers, Taiwan, were retained by the Company to audit and have issued an audit report relating to the Consolidated Financial Statements. The Business Report, the Consolidated Financial Statements and proposal for earnings distribution have been reviewed and determined to be correct and accurate by the Audit Committee members of the Company. According to Article 14-4 of the ROC Securities and Exchange Act and Article 219 of the ROC Company Act, we hereby submit this Report.

英屬蓋曼群島商環宇通訊半導體控股股份有限公司  
GCS Holdings, Inc.

審計委員會召集人：曾宗琳  
Convener of the Audit Committee: Tsung-Lin Tseng

日期：西元 2022 年 2 月 23 日  
Date: February 23, 2022

IV. Financial statement audited and attested by CPAs: Please refer to pages 165-243 of this annual report.

V. The impact of financial difficulties, if any, on the Company's financial status: The Company and the affiliated companies had not experienced financial difficulties in the most recent year and as of the annual report publication date.

## Seven. Review and analysis of the financial status and financial performance and risks

### I. Financial analysis

Unit: NT\$ Thousands

Item	Fiscal Year	2021/12/31	2022/12/31	Difference	
				Increased (Decreased) amount	%
Current assets		2,390,262	1,094,020	(1,296,242)	(54.23%)
Non-current financial assets at fair value through other comprehensive income		-	1,397	1,397	100%
Investments accounted for using equity method		1,690,553	2,446,614	756,061	44.72%
Property, plant and equipment		575,485	695,667	120,182	20.88%
Right-of-use assets		3,641	24,448	20,807	571.46%
Intangible assets		94,366	56,678	(37,688)	(39.94%)
Other assets		147,687	198,090	50,403	34.13%
<b>Total assets</b>		<b>4,901,994</b>	<b>4,516,914</b>	<b>(385,080)</b>	<b>(7.86%)</b>
Current liabilities		154,908	405,580	250,672	161.82%
Other liabilities		247,846	410,612	162,766	65.67%
<b>Total liabilities</b>		<b>402,754</b>	<b>816,192</b>	<b>413,438</b>	<b>102.65%</b>
Share capital		1,106,761	1,108,251	1,490	0.13%
Capital surplus		2,937,329	2,825,143	(112,186)	(3.82%)
Retained earnings		722,148	(222,913)	(945,061)	(130.87%)
Other equity interest		(254,043)	(9,759)	244,284	(96.16%)
Treasury stocks		(12,955)	-	12,955	(100%)
<b>Total equity</b>		<b>4,499,240</b>	<b>3,700,722</b>	<b>(798,518)</b>	<b>(17.75%)</b>
(I) Explanation of major changes (the ratio of change between two periods is more than 20%, and the amount of change exceeds NT\$10,000,000):					
<ol style="list-style-type: none"> <li>1. Current assets: Increase in this year's reinvestment expenditure that results in the reduction of cash and cash equivalents.</li> <li>2. Investments accounted for using equity method: The increase in investment for Unikorn Semiconductor Corporation and Changzhou Chemsemi Co., Ltd. is the main reason.</li> <li>3. Property, plant and equipment: Caused by the increase of machinery equipment this year.</li> <li>4. Right-of-use assets: The expiration and renewal of the office lease agreement led to an increase in right-of-use assets.</li> <li>5. Intangible assets: The loss from goodwill impairment recognized.</li> <li>6. Other assets: The increase in deferred income tax assets and prepayments for equipment this year .</li> <li>7. Current liabilities: Increase in other payable accounts this year.</li> <li>8. Other liabilities: Increase in long-term bank borrowing by subsidiary GCS, U.S.A.</li> <li>9. Retained earnings: It is due to the increase in net loss this year.</li> <li>10. Other equity interest: It is mainly due to changes in the conversion of the financial statements of foreign operating institutions.</li> <li>11. Treasury stock: The decrease in the amount of treasury stock is due to the cancellation of treasury stock in the current year.</li> </ol>					
(II) The changes occurred do not have a material impact on the financial position.					

### II. Financial performance

(I) Comparative analysis of financial performance

Unit: NT\$ Thousands

Item \ Fiscal Year	2021	2022	Increased (Decreased) amount	Change ratio (%)
Operating revenue	1,235,881	1,333,810	97,929	7.92%
Cost of operating revenue	890,824	1,018,881	128,057	14.38%
Gross profit	345,057	314,929	(30,128)	(8.73%)
Operating expenses	375,871	452,262	76,391	20.32%
Operating loss	(30,814)	(137,333)	(106,519)	345.68%
Non-operating expenses	(356,396)	(814,368)	(457,972)	128.5%
Loss before income tax	(387,210)	(951,701)	(564,491)	145.78%
Income tax benefit	8,713	11,984	3,271	37.54%
Net loss	(378,497)	(939,717)	(561,220)	148.28%
Explanation of major changes (the ratio of change between two periods is more than 20%, and the amount of change exceeds NT\$10,000,000):				
<ol style="list-style-type: none"><li>1. Operating expenses: The increase in the expected credit loss and adjustment of salary expenses recognized this year led to an increase in the operating expense this year.</li><li>2. Operating loss: The drop in the optoelectronic wafer foundry and KGD with relatively higher gross profits to the operating revenue ratios this year led to a decrease in operating gross margin.</li><li>3. Non-operating expenses: The increase in the amount of investment loss under the equity method and the reduction in other income recognized this year.</li><li>4. Loss before income tax: The increase in operating loss this year, furthermore, the increase in investment loss under equity method recognized this year and reduction in other income led to the increase of the amount of pre-tax loss.</li><li>5. Net loss: The increase in operating loss this year, furthermore, the increase in investment loss under the equity method recognized this year and the reduction in other income led to the increase in the amount of net loss.</li></ol>				

III. Cash Flow

(I) Analysis of cash flow changes during the most recent fiscal year

Unit: NT\$ Thousands

Item \ Year	2021	2022	Increased (Decreased) amount	Change ratio (%)
Operating activities	215,764	(67,234)	(282,998)	(131.16%)
Investing activities	(453,932)	(1,580,501)	(1,126,569)	248.18%
Financing activities	973,142	143,643	(829,499)	(85.24%)
Analysis of the change in the increase (decrease) ratio:				
<ol style="list-style-type: none"><li>1. Operating activities: The amount of net cash outflow for this year's operating activities was increased compared with last year due to the declined profits this year.</li><li>2. Investing activities: The amount of net cash outflow for this year's investment activities compared with last year due to the increase in investment for Unikorn Semiconductor Corporation and ChangZhou ChemSemi Co., Ltd. this year.</li><li>3. Financing activities: The amount of net cash inflow from financing activities this year decreased compared to last year since the fundraising by issuing private offering of common shares was completed last year, but no fundraising was conducted this year.</li></ol>				

(II) Liquidity analysis and corrective measures to be taken in response to illiquidity for the coming year:

1. Corrective measures to be taken in response to illiquidity: Not applicable.

## 2. Liquidity analysis for the coming year (2023)

Unit: NT\$ Thousands

Cash balance - beginning	Expected cash flow from operating activities	Expected cash flow from investing and financing activities	Estimated cash balance (shortage) amount	Plan for estimated cash shortage	
				Investing activities	Financing activities
442,196	183,615	(429,909)	195,902	-	-
<p>1. Analysis of changes in cash flow for the coming year:            Operating activities: The expected growth in company operations results in net cash inflows from operating activities.            Investing and financing activities: In response to the Company's business operation, the Company will evaluate the relevant financing plans to support the net cash outflows related to reinvestment expenditures, the purchase of machinery equipment, and the repayment of loans.</p> <p>2. Corrective measures for insufficient cash and liquidity analysis: None</p>					

#### IV. The effect of major capital expenditures upon financial operations during the most recent years :

The Company will continue to expand production capacity in response to the needs of business growth. The Company's main capital expenditure is for the purchase of machinery equipment. The relevant capital needs, if any, will be supported with self-owned capital or fundraising.

#### V. Reinvestment policy for the most recent fiscal year, the main reasons for the profits or losses generated thereby, the plan improving reinvestment profitability, and investment plans for the coming year:

##### (I) Reinvestment policy:

The Company re-invests companies in the same industry for the purpose of expanding the operation scale.

##### (II) The main reasons for reinvestment profits or losses and improvement plan for the most recent year :

- GCS reinvested in Unikorn Semiconductor Corporation. The company made significant progress in upgrading capacity, processing improvement, and approaching new customers, as well as the growth in sales revenue. Nonetheless, due to the delay in certification schedule after product completion plus the impact of inflation, the demand for related consumer electronics products declined and hence the quantity of orders has not reached the proper economic scale that put the company still under loss. Hence, GCS recognized the relevant investment loss. In the future, Unikorn will exploit the source of customers and upgrade the processing technology, as well as constantly strengthening the speed of product certification with effective expenditure control to reduce loss and make profits.
- GCS reinvested in Changzhou Chemsemi Co., Ltd. Due to the impact of COVID-19, the installation of relevant equipment and the schedule for customer

completion of certification for production were delayed. Moreover, the factory and equipment of Changzhou Chemsemi Co., Ltd. are still under installation with relatively higher costs and expenses. The company has not reached the economic scale of order and hence the operation is still under loss. GCS recognized the relevant investment loss. In the future, the Company will speed up the installation schedule of relevant equipment and factory building to increase the utilization, explore the source of customers, constantly boost the speed of product certification, and meet the expected investment benefits early.

3. GCS reinvested in Shanghai Galasemi Co., Ltd. The company was established in December 2020 and started taking sales orders while the sales revenue grew eventually. However, due to the relatively higher operating expenses, the operation of this period is still under loss. In the future, the Company will explore the source of customers to increase sales revenue with effective control of expenditures, in order to make profits.

(III) Investment plans for the coming year:

The Company will participate in the capital increase of the invested company to expand the scale of operation, and will continue to evaluate the investment potential and plans that are in line with the Company's strategic development. The investment plans will be implemented in compliance with relevant laws and regulations and operating procedures.

VI. Risk management and evaluation

- (I) The 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. Changes in interest rate

The interest income in the Company's 2022 and 2021 consolidated financial reports was NT\$3,592 thousand and NT\$5,532 thousand, respectively, which is 0.27% and 0.45% of the net operating revenue each year which was relatively low. In addition, the interest expense in the Company's 2022 and 2021 consolidated financial reports was NT\$12,090 thousands and NT\$4,632 thousands, respectively, which is 0.91% and 0.37% of the net operating income each year which was relatively low. Therefore, changes in interest rate would not have a significant impact on the Company's operations. The Company will observe any change in interest rate constantly to reduce the impact on profit and loss.

2. Changes in exchange rate

The Company's main purchases and sales are denominated in US dollars. Therefore, the accounts receivable and payable for the purchase and sales transactions can offset each other, resulting in a natural hedging effect. The Company's exchange (losses) gains in 2022 and 2021 were (NT\$29,124 thousand) and NT\$1,853



thousand, respectively, which had no significant impact on the Company's profit and loss.

The Company's functional currency is USD. There is no significant exchange rate fluctuation risk as of now. The fundraising and dividend distribution to investors needs to be exchanged into US dollars in Taiwan; therefore, there is the risk of exchange rate fluctuation between the US dollar and the Taiwan dollar to be considered. In order to reduce the impact of exchange rate changes on the Company's profit and loss, the Company will collect exchange rate data at any time through the online exchange rate real-time system and close contact with financial institutions in order to study and anticipate exchange rate changes as a reference for foreign exchange transactions. Strategically, the Company will try to balance foreign currency assets and liabilities as much as possible to achieve the effect of natural hedging and reduce the impact of exchange rate fluctuations. The Company will adopt derivative financial products with hedging effect as the operating strategy depending on the changes in the foreign exchange market and the demand for foreign exchange funds in order to avoid relevant exchange rate risks in the future.

### 3. Inflation

The Company's profit and loss in the past has not been significantly affected by inflation. If the purchase cost increases due to inflation, the Company will adjust the sales price in a timely manner to reduce the impact of inflation on the Company's operations. In addition, the Company will review and collect relevant information for the reference of management in decision-making by regularly or occasionally referring to the economic data and reports of the government and research institutions.

- (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 for the most recent year and as of the annual report publication date:

The Company focuses on business operation with a prudent and conservative financial policy adopted; also, the Company does not engage in high-risk and high-leverage investments. In addition, the Company has formulated the "Procedures for Lending Funds to Other Parties," "Procedures for Endorsement & Guarantee," "Procedures for Acquisition or Disposal of Assets," and "Procedure for Derivatives Transaction," which have been approved by the shareholders meeting in order to have business operations implemented in accordance with the relevant regulations. The Company and the subsidiaries have lending funds to others, endorsements and guarantees, and derivative transactions conducted in accordance with the procedures

formulated by the Company, and have them announced and reported regularly in accordance with the regulations.

1. Lending funds to others: The Company's subsidiaries have lending funds limited to the Company and its 100% owned subsidiaries and sub-subsidiaries as of the annual report publication date.
2. Endorsements and guarantees: The Company's endorsements and guarantees are limited to the Company's subsidiaries as of the annual report publication date.
3. Derivatives transactions: There is no relevant transaction as of the annual report publication date.

(III) Research and development work to be carried out in the future, and further expenditures expected for research and development work

The marketing and R&D units observe the market development trends closely with new technologies and process R&D carried out continuously to maintain the advantages of advanced technology. Please refer to the new products and services to be developed in the future and the technology development detailed in "Five. Operation Overview." The Company's R&D expenses in 2022 and 2021 were NT\$175,008 thousand and NT\$160,583 thousand, respectively, accounted for 13.1% and 13.0% of the net operating revenue of each year, respectively. The R&D expenses that are going to be invested in approximately accounted for 11%-14% of the net operating revenue in 2022.

The Company will continue to invest in R&D according to the product development plans in the future in order to maintain a competitive advantage in the market. However, product development and related R&D plans will be limited without the continuing investment resources contributed in the future, as a result, the Company will not be able to meet market trends or customer needs with the risk of losing customer orders that is detrimental to the Company's operations.

(IV) Effect on the company's financial operations of important policies adopted and changes in the legal environment at home and abroad, and measures to be taken in response

The Company is registered in the Cayman Islands and mainly operates in the United States. The Company registers in the Cayman Islands but does not carry out any substantial economic activities locally. Providing financial services is the main economic activity of the Cayman Islands. The United States is the main economic system of the world with a relatively stable economic development and political environment provided. The Company has the business operations carried out in accordance with local policies, laws, and regulations; furthermore, the Company constantly observes the development trend of important domestic and foreign policies and the changes in laws; also, consults attorneys, CPAs, and other professionals for

any changes occurred as stated in the preceding paragraph with countermeasures evaluated and formed accordingly. The Company had not experienced any material events that had affected the Company's financial operations due to the important policy and law changes that occurred in the aforesaid regions in the most recent year and as of the annual report publication date. In addition, the Company will constantly observe changes in important domestic and foreign policies and laws in order to take appropriate countermeasures in a timely manner.

- (V) Effect on the company's financial operations of developments in science and technology (including cyber security risks) as well as industrial change, and measures to be taken in response

The Company constantly observes market trends and evaluates the changes in supply and demand of the industry in order to understand the impact of technological and industrial changes on the Company in a timely manner. The Company's advanced technology is a competitive advantage; also, the Company strives to develop new technologies in order to stay ahead. The Company had not experienced any material impact on the Company's finance and operations due to technological or industrial changes in the most recent year and as of the annual report publication date.

Information security is facing more challenges nowadays due to the continuous advancement of network and communication technology, the introduction of new technologies, and the threat of hacker attacks and malware. In addition to the current information security protection mechanism, the company regularly holds information security management meetings, conducts various information security inspections and audits, and enhances awareness among employees regarding the importance of information security. The Company will continue to enhance network security and system access protection measures in the future in order to minimize information security risks and threats.

- (VI) Effect on the company's crisis management of changes in the company's corporate image, and measures to be taken in response

The Company has adhered to the operating principles of integrity and professionalism since its incorporation, enhanced the Company's internal management and quality management capabilities, and introduced external directors to help the Company move towards international, large-scale, and institutionalized corporate governance. There had been no material change in the company's corporate image in the most recent year and as of the annual report publication date.

- (VII) Expected benefits and possible risks associated with any merger and acquisitions, and mitigation measures being or to be taken

The Company had no plan to carry out mergers and acquisitions in the most recent year and as of the annual report publication date. However, the merger and acquisition plan in the future, if any, will be handled in compliance with the governing laws and

regulations and the relevant management procedures formulated by the Company with the overall efficiency of the merger and acquisition plan carefully evaluated for the sake of protecting the interests of the Company and shareholders.

(VIII) Expected benefits and possible risks associated with any plant expansion, and mitigation measures being or to be taken

The Company has no definite plan to expand the factories in the near future. The Company will expand the operation scale by investing in other companies related to the industry in the short run. The Company will carefully evaluate any investment expansion plans with limited investment risk expected.

(IX) Risks associated with any consolidation of sales or purchasing operations, and mitigation measures being or to be taken

1. Purchasing concentration

Raw material purchases mainly for gallium arsenide (GaAs), indium phosphide (InP), epitaxy wafers, precious metals and chemicals, etc. The major suppliers accounted for 28.10% and 33.9% of the Company's purchase of raw materials in 2022 and 2021, respectively.

The GaAs and InP wafer foundry of the Company is mainly implemented with the technology developed by the Company; therefore, the Company has the autonomy of selecting suppliers. The Company will validate at least 2 suppliers for each technology or process, especially, in the case of mass production.

Regarding a small volume and multiple types of technology or process, for example, InP Epitaxy Wafer used in optoelectronic products, since the basic characteristics of compounds are mostly determined during epitaxial growth, the stable quality of epitaxy is critical to the yield rate. It takes time to secure product quality and yield rate; therefore, the supplier's process capability, quality reliability, production capacity, cost, and lead time for delivery are the main concerns of the Company. The Company for the consideration of stable quality, economical purchasing volume, and customer request will maintain a stable and long-term strategic cooperative relation with professional suppliers.

The Company will continue to seek other sources of supply in order to avoid the possible purchasing concentration risk and to secure a stable source of GaAs, InP epitaxy wafers, and precious metals, especially Epitaxy Wafer and precious metals with particularly stringent quality and performance requirements.

2. Sales concentration

The Company's foundry customers are mostly world-class IDM or fabless design companies, while the customers for KGD-brand optoelectronic devices are mostly large-scale down-stream packaging factories or module manufacturers. The largest customer accounted for 26.21% and 27.19% of the Company's sales in 2022 and 2021, respectively. The Company will continue to develop new wafer

foundry technologies, such as, GaN technology and high-end InP technology, and expand production capacity by cooperating with strategic partners or invested companies to facilitate receiving customer orders; also, the Company will actively accelerate developing new KGD-brand optoelectronic devices progressively. The Company aims to increase the number of customers with the new technologies and products developed, thereby the objective of customer dispersion can be achieved.

(X) Effect upon and risk to the company in the event a major quantity of shares belonging to a director, supervisor, or shareholder holding greater than a 10 percent stake in the company has been transferred or has otherwise changed hands, and mitigation measures being or to be taken: None

(XI) Effect upon and risk to the company associated with any change in governance personnel or top management, and mitigation measures being or to be taken

The Company had no any change in the management rights in the most recent year and as of the annual report publication date. The Company has enhanced corporate governance measures, introduced independent directors, and established an Audit Committee to enhance the protection of overall shareholders' rights and interests. The current strong professional managerial officers have contributed to the Company's operating performance significantly, and the continuing support of the shareholders can be expected in the future. Therefore, the changes in the management rights, if any, should not have a significant negative impact on the Company's management and operating advantages.

(XII) Litigious and non-litigious matters. List major litigious, non-litigious or administrative disputes that: (1) involve the company and/or any company director, any company supervisor, the general manager, any person with actual responsibility for the firm, any major shareholder holding a stake of greater than 10 percent, and/or any company or companies controlled by the company; and (2) have been concluded by means of a final and unappealable judgment, or are still under litigation. Where such a dispute could materially affect shareholders' equity or the prices of the company's securities, the annual report shall disclose the facts of the dispute, the amount of money at stake in the dispute, the date of litigation commencement, the main parties to the dispute, and the status of the dispute as of the date of publication of the annual report: None

(XIII) Other important risks and mitigation measures being or to be taken

1. Important operational risks and countermeasures

The Company is facing many risks and dangers in the course of business operation, including failure, damage, or malfunction of machinery equipment, delay in delivery of equipment, limited production capacity, labor strikes, fires, natural disasters, such as, earthquakes or typhoons, environmental disasters or

occupational disasters, etc. The business operation could be interrupted due to the occurrence of any specific incident.

Currently, the Company has followed the general practice of the industries in the United States to acquire property insurance, which includes plant, machinery equipment, etc. However, it does not cover any business interruption in the US factory or compensation for damage to environmental protection since it is not expressly required by the law of the United States or such insurance cannot be obtained in the United States. Therefore, the Company may suffer losses or be liable for the subsequent occurrence of such risks since such specific insurance is not available in the United States. In addition, the coverage of the insurance acquired by the Company may be insufficient to provide adequate protection against possible losses, which may adversely affect the business, financial condition, and operation results.

## 2. Intellectual property rights

There had been no accusation of intellectual property rights infringement against the Company raised by any third party to the best knowledge of the Company in the most recent year and as of the annual report publication date. However, accusations of intellectual property right infringement are not uncommon in the technology industry. The Company may be accused of intellectual property rights infringement by others in the future with or without sufficient evidence supported. An accusation could have affected the Company's reputation, finance, business, revenue, etc., as well as a high litigation fee that is detrimental to the business operations.

## 3. The impact and risks of the resignation of the management team or R&D personnel on the Company

The Company's subsidiary in the main operating country is engaged in the research, development, production, and sales of wafer foundry and optoelectronic products. Talent is one of the Company's most important assets. It is challenging and time-consuming in cultivating R&D talents; therefore, the resignation of the management team or the key R&D personnel may adversely affect the Company's operations.

Therefore, in addition to establishing a good communication channel with employees, it is necessary to provide an environment for employees to learn and grow in order to enhance employees' loyalty and cohesion, and reduce the risk of personnel turnover; furthermore, implement relevant employee incentive programs to attract and retain the needed professionals, and establish the correlation between the participation of senior management and the business performance of the company.

## 4. Risk of senior manager turnover

The Company's business performance relies on the business strategy of the senior management and the accumulated customer relationships for a successful business expansion. Therefore, the Company's business operation could be affected adversely by the senior management turnover without adequate substitutes recruited in time for the job. Under the circumstance, the Company is committed to improving internal working environment and well-being, and establishing the correlation between the participation of senior management and the business performance of the company to reduce the risk of senior management turnover.

5. The Company is a holding company and is dependent on the performance of its subsidiaries and their ability to distribute dividends and is subject to restrictions on their distribution of dividends and transfers of funds

The Company is a holding company established in the Cayman Islands without any commercial operation and source of revenue; therefore, mainly relies on the source of income from the subsidiaries. The Company's subsidiaries in the United States are an important source of operating profit for the Group. Therefore, the Company's distribution of cash dividends will be affected by the distribution of cash dividends or the reserve of earnings of the subsidiaries.

In addition, the Company's subsidiaries are separate and independent juristic persons. When a subsidiary is facing bankruptcy, insolvency, reorganization, liquidation, or assets realization, the assets acquired by the Company or the priority of distribution will be inferior to that of the subsidiary's creditors, including the subsidiary's transaction counterparty and the holder of the bonds issued by the subsidiary.

The Company's distribution of dividends or other benefits will be handled in accordance with relevant regulations. Investors are advised to have a solid understanding of the tax impact on their investment in a holding company and to consult with experts.

6. Protection of shareholders' equity

The Company Act of the Cayman Islands and the Republic of China is different in many ways. The Company has the articles of incorporation amended in accordance with the "Checklist for the Protection of Shareholders' Equity at Where the Foreign Issuers Registered" stipulated by Taipei Exchange. However, there remains many differences in the regulations governing business operation; therefore, investors cannot have the legal rights and interests of investment in Taiwan applied to the investment implemented in the Cayman Islands. Investors are advised to have a solid understanding and to consult with experts whether their shareholders' equity is protected by the law of the Cayman Islands.

7. Risks related to the statements in this annual report

① Facts and statistics

Certain information and statistics in this annual report are derived from different statistical publications, and such information may be inaccurate, incomplete, or outdated. The Company does not make any statement on the correctness or accuracy of such publications, and investors should not excessively rely their investment decisions on such information.

② Forward-looking statements and risks and uncertainties contained in this annual report

The forward-looking statements and information related to the Company and the affiliated companies in this annual report are based on the beliefs, assumptions, and information currently available to the Company's management. The wordings of "expect," "believe," "could," "anticipate," "in the future," "intend," "may be," "must," "plan," "estimate," "seek," "should," "will," "may," "hope" and similar expressions in the annual report applied to the Company or the Company's management are intended as forward-looking statements. Such statements reflect the current viewpoints of the Company's management on future events, operations, current funds, and sources of funds; also, some of the viewpoints may not be realized or may be changed. These statements may be affected by certain risks, uncertainties, and assumptions, including other risk factors described in this annual report. Investors should think thoroughly since any forward-looking statement involves known and unknown risks and uncertainties. These risks and uncertainties faced by the Company may affect the accuracy of forward-looking statements, including but not limited to the following:

Two. Description of operation overview in this annual report

It refers to the price, quantity, operations, profit trends, overall market trends, risk management, and exchange rates stated in this annual report .

The Company will not update forward-looking statements in this annual report or revise this annual report for any event or information that occurred thereafter. The forward-looking statements and circumstances in this annual report may or may not occur in the way that the Company anticipates due to the aforesaid risks, other risks, uncertainties, and assumptions. Therefore, investors should not rely on any forward-looking statement. Please refer to pages 113-116 of this annual report regarding the advantages, disadvantages, and countermeasures of the Company's development prospects for other material risks and countermeasures related to the Company's operations. However, despite these countermeasures, the implementation could be interrupted due to force majeure events, resulting in adverse effect on the



Company's business, operating results, and financial conditions.

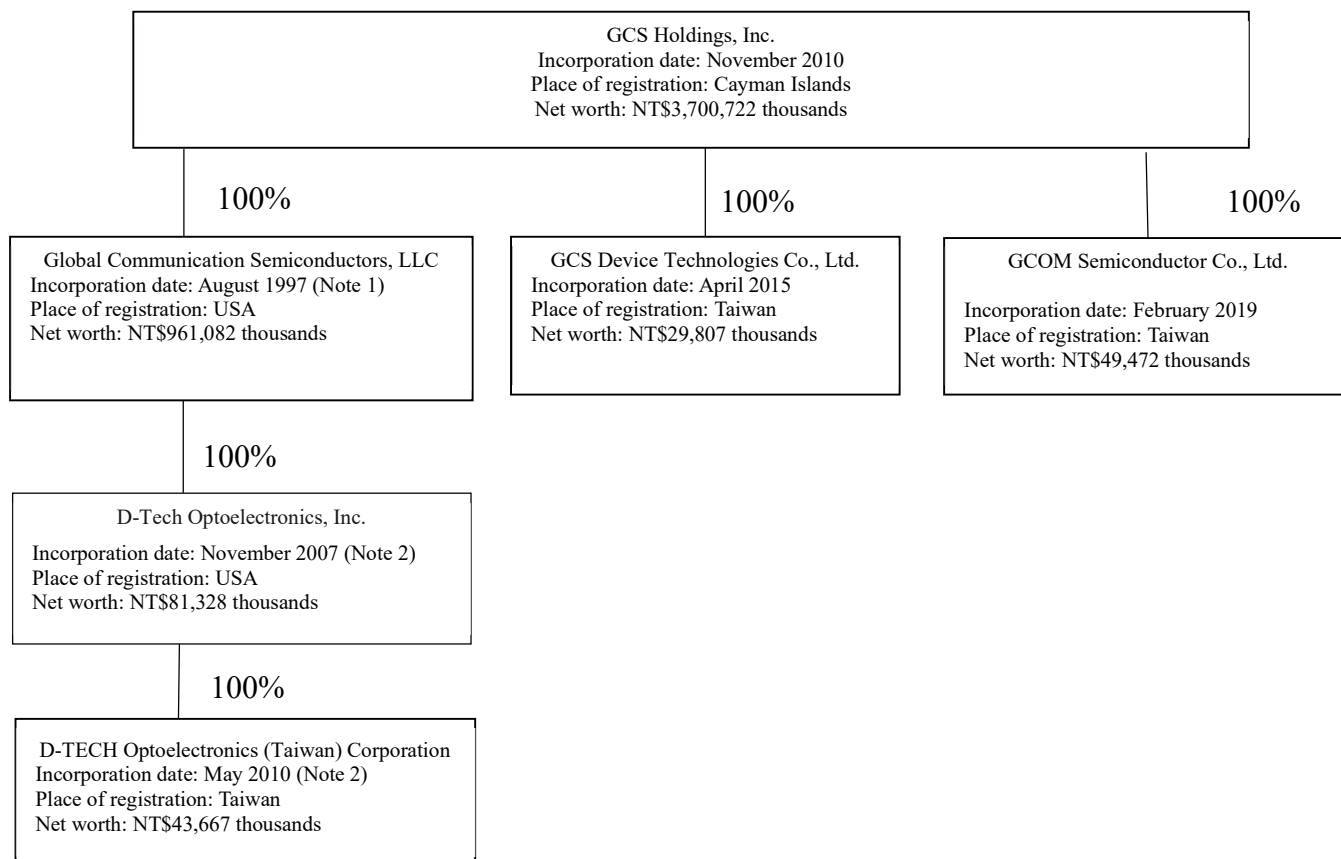
VII. Other important matters: None

## Eight. Special disclosures

### I. Information on affiliates

#### (I) Affiliated enterprise' organization chart

December 31, 2022



Data source: The 2022 consolidated financial report audited and attested by CPAs and the Company.

Note 1: Global Communication Semiconductors, Inc. was renamed as “Global Communication Semiconductors, LLC” in January 2011.

Note 2: Global Communication Semiconductors, LLC, a subsidiary, had acquired 100% equity of D-Tech Optoelectronics, Inc. in cash in July 2017, and indirectly acquired 100% equity of its subsidiary, D-Tech Optoelectronics (Taiwan) Corporation.

## (II) Affiliated enterprises' information

December 31, 2022  
Unit: NT\$ Thousands; shares

Reinvested business	Main business activities	Investment cost	Shareholding		Accounting method
			Shares	Ratio	
GCS USA	1. Manufacturing of compound semiconductor wafers and foundry related services as well as granting royalty rights for intellectual property 2. Manufacturing and selling of advanced optoelectronics technology products	403,975	(Note 1)	100%	Equity Method
GCS Device Technologies Co., Ltd.	Product design and research development services	12,000	(Note 2)	100%	Equity Method
GCOM Semiconductor Co., Ltd.	Wholesaling and retailing of electronic components, product design, and outsourcing management services	50,000	5,000,000	100%	Equity Method
D-Tech Optoelectronics, Inc.	Developing, manufacturing and selling of photodiodes and avalanche photodiodes for telecommunication systems and data communication networks	393,380	360,000	100%	Equity Method
D-TECH Optoelectronics (Taiwan) Corporation	Manufacturing, retailing and wholesaling of telecommunications devices, and manufacturing and wholesaling of electronic components	89,840	5,800,000	100%	Equity Method

Note 1: GCS USA is a limited liability company, not a company limited by shares; therefore, no stock share is issued.

Note 2: GCS Device Technologies Co., Ltd. is a limited liability company, not a company limited by shares; therefore, no stock share is issued.

(III) Information on the same shareholders of the companies with a “controlling and subordinate relation”: None

(IV) The overall business activities of the affiliated enterprises: The main business activities of the Company's affiliated enterprises include compound semiconductor wafer foundry service, the research, development, production, and sales of KGD-brand optoelectronic products, product design, and related services.

## (V) Information on the directors, supervisors, and Presidents of the affiliated enterprises

December 31, 2022

Company name	Job title	Name or representative	Shareholding (invested amount)	Shareholding ratio
GCS USA (Note 1)	CEO & President	Ann, Bau Hsing	The Company's invested amount NT\$403,975 thousand	100%
GCS Device Technologies Co., Ltd. (Note 2)	Corporate director representative	Huang, Ta-Lun	The Company's invested amount NT\$12,000 thousand	100%
	President	Yu, You-chong		
GCOM Semiconductor Co., Ltd.	Note 3	Note 3	The Company's shareholding 5,000,000 shares	100%
D-Tech Optoelectronics, Inc.	Director	Ann, Bau Hsing	GCS USA shareholding 360,000 shares	100%
	President	Wu, Xiu-cheng		
D-TECH Optoelectronics (Taiwan) Corporation	Corporate chairman representative	Ann, Bau Hsing	D-Tech Optoelectronics, Inc. shareholding 5,800,000 shares	100%
	Corporate director representative	Lin, Shu-Wei		
	Corporate supervisor representative	Ou, Ssu-Tsun		

Note 1: GCS USA is a limited liability company, not a company limited by shares; therefore, no stock share is issued and no director and supervisor are appointed.

Note 2: GCS Device Technologies Co., Ltd. is a limited liability company, not a company limited by shares; therefore, no stock share is issued.

Note 3: The board of directors of GCS Holdings, Inc. resolved the dissolution and liquidation of the subsidiary GCOM Semiconductor Co., Ltd. In November 2022. As of the annual report publication date, GCOM Semiconductor Co., Ltd. has been dissolved, and the liquidation process is still ongoing.

(VI) Operational overview of each affiliated enterprise

Unit: NT\$ Thousands; December 31, 2022

Company name	Total assets	Total liabilities	Net worth	Operating revenue	Operating profit (loss)	Profit (loss)	Earnings (losses) per share (NT\$)
GCS USA	1,590,861	629,779	961,082	1,319,647	(37,505)	(134,405)	Note 1
GCS Device Technologies Co., Ltd.	50,848	21,041	29,807	9,195	521	4,389	Note 2
GCOM Semiconductor Co., Ltd.	49,572	100	49,472	-	(182)	(127)	(0.02)
D-Tech Optoelectronics, Inc.	161,525	80,197	81,328	27,748	(58,443)	(65,327)	(181.46)
D-TECH Optoelectronics (Taiwan) Corporation	47,176	3,509	43,667	25,111	(11,030)	(11,740)	(2.02)

Note 1: GCS USA is a limited liability company, not a company limited by shares; therefore, the earnings per share is not applicable.

Note 2: GCS Device Technologies Co., Ltd. is a limited liability company, not a company limited by shares; therefore, the earnings per share is not applicable.

(VII) Consolidated financial statements of affiliated enterprises: Please refer to pages 165-243 of this annual report for the financial report in details.

(VIII) Affiliations report: The Company is not a subordinate company as defined in the “affiliated enterprises” chapter of the Company Act; therefore, it is not applicable.

II. The private placement of securities during the most recent fiscal year and the current fiscal year up to the date of annual report publication date :

(I) The shareholders meeting of GCS had resolved on July 2, 2021 to issue up to 20,000,000 ordinary shares under then-current financial market conditions when appropriate pursuant to applicable laws and regulations, and select one or combined fund raising plans in one or more installments, by ways of issuing new shares for cash consideration In the ROC and/or issuing ordinary shares for participating in issuance of global depositary receipts and/or, through a private placement, issuing ordinary shares for cash consideration or issuing ordinary shares for participating in issuance of global depositary receipts or issuing domestic or overseas convertible bonds. When issuing domestic or overseas convertible bonds in the course of private placement, the total shares upon conversion shall not exceed 20,000,000 ordinary shares at then-current conversion price calculated at the pricing date. The purpose of the current fundraising project was for the replenishment of working capital, reinvestment, and others in order to expand the operation scale and strengthen GCS’s competitiveness and financial structure. The issuance of ordinary shares through private placement for cash capital increase was resolved in the special shareholders meeting on December 10, 2021; and GCS had completed the issuance of 20,000,000 ordinary shares through private placement within the aforementioned threshold of issuance amount. Therefore, GCS had this case cancelled according to the resolution of the board of directors on February 23, 2022

(II) The issuance of ordinary shares through private placement for cash capital increase was resolved in the extraordinary shareholders meeting on December 10, 2021 as follows:

Item	First private placement in 2021 Issue Date: January 18, 2022				
Types of Securities through private placement	Ordinary shares				
Shareholders' resolution date and amount	<ol style="list-style-type: none"> <li>Resolution date of the shareholders' meeting: December 10, 2021.</li> <li>The estimated issued shares and the issued shares for the long-term fundraising proposal approved by the shareholders' meeting of the Company on July 2, 2021 would be up to 20,000,000 ordinary shares.</li> </ol>				
References and rationality of price	<ol style="list-style-type: none"> <li>This private placement reference price was NTD 50.98 which is chosen from the higher price calculated based on below two calculation standards decided by the Company's special shareholders meeting on December 10, 2021. <ul style="list-style-type: none"> <li>(A) The simple average closing price of the common shares for either the 1, 3, or 5 business days before the price determination date, after adjustment for any distribution of stock dividends, cash dividends, or capital reduction was NT\$50.70, NT\$50.39, and NT\$50.34 respectively. Then choose the average closing price for 5 business days before the price determination date NT\$50.34 as the benchmark.</li> <li>(B) The simple average closing price of the common shares or the 30 business days before the price determination date, after adjustment for any distribution of stock dividends, cash dividends, or capital reduction NT\$50.98 as the benchmark.</li> </ul> </li> <li>The private placement price should not be lower than 80% of the reference price. Therefore, the subscription price per share through private placement was NT\$40.79, which was 80.01% of the reference price that met the resolution of the special shareholders meeting regarding no lower than 80% reference price.</li> <li>The aforementioned private placement price was determined in accordance with the relevant regulations of the competent authority. In addition, a three-year transfer restriction on securities through private placement was imposed according to the Securities and Exchange Act. Therefore, the private placement price was considered to be reasonable.</li> </ol>				
Selection manner of specific persons	It is limited to a specific person who complies with Article 43-6 of the Securities and Exchange Act, other relevant laws and regulations, and the relevant regulations of the competent authority.				
Reasons for private placement	The Company plans to issue ordinary shares through private placement for cash capital increase in order to ensure the timeliness and feasibility of fundraising and to effectively reduce the cost of capital. In addition, the board of directors is authorized to handle private placements according to market conditions and the Company's actual needs in order to improve the Company's flexibility and efficiency of fundraising. The three-year transfer restriction on securities through private placement will further ensure the long-term cooperative relationship between the Company and strategic investors.				
Payment completion date	The date was December 24, 2021, with a total amount of NT\$815,800,000 collected.				
Applicant Information	Private placement applicant	Eligibility conditions	Subscription quantity	Relationship with the Company	Participating company's operation
	Wei, Shih-Yu	Complying with the provisions of Article 43-6, Paragraph 1, Subparagraph 2 of the Securities and Exchange Act	1,000,000 shares	Insider of the Company	None

Item	First private placement in 2021				
	Issue Date: January 18, 2022				
	Chen ,Yu-Zhen	Complying with the provisions of Article 43-6, Paragraph 1, Subparagraph 2 of the Securities and Exchange Act	1,000,000 shares	Top-10 shareholders of the Company	None
	Shaw, Shung-Ho	Complying with the provisions of Article 43-6, Paragraph 1, Subparagraph 2 of the Securities and Exchange Act	750,000 shares	None	None
	Calystar Investment Corp.	Complying with the provisions of Article 43-6, Paragraph 1, Subparagraph 2 of the Securities and Exchange Act	6,500,000 shares	Related party of the Company	None
	Joray Co., Ltd.	Complying with the provisions of Article 43-6, Paragraph 1, Subparagraph 2 of the Securities and Exchange Act	4,750,000 shares	None	None
	Ronly Venture Corporation	Complying with the provisions of Article 43-6, Paragraph 1, Subparagraph 2 of the Securities and Exchange Act	3,500,000 shares	None	None
	Chuan Wei Investment Co., Ltd	Complying with the provisions of Article 43-6, Paragraph 1, Subparagraph 2 of the Securities and Exchange Act	2,500,000 shares	None	None
Actual subscription price	NT\$40.79 per share				
Difference between actual subscription price and reference price	The actual subscription price is NT\$40.79, and the reference price is NT\$50.98, which is in line with the resolution of the special shareholders meeting regarding no lower than 80% reference price.				
The impact of private placement on shareholders' equity	Issuance of 20,000,000 shares is accounted for approximately 18.07% of the Company's issued shares.				

Item	First private placement in 2021 Issue Date: January 18, 2022
The use of the funds and the progress of plan implementation	<p>As of the annual report publication date, the disbursed amount of private equity funds is NT\$718,917,261. The breakdown is as follows:</p> <ol style="list-style-type: none"> <li>1. NT\$700,000,000 is allocated for reinvestment purposes, specifically participating in the cash capital increase of Unikorn Semiconductor Corporation.</li> <li>2. NT\$18,904,511 is allocated for enhancing working capital.</li> <li>3. NT\$12,750 is allocated for related bank charges.</li> </ol> <p>The rest of the fund was deposited in the bank.</p>
Private placement effect	The fund is used in one or more projects of replenishing working capital, investment, etc. The expected benefits are expanding operating scale, enhancing financial structure, and reinforcing market competitiveness.

III. Holding or disposal of the Company's shares by its subsidiaries in the most recent year and as of the annual report publication date: None

IV. Other supplementary information

Explanation of the major differences between the articles of association and the protection of shareholders' equity in the Republic of China (ROC) :

Important matters concerning the protection of shareholders' equity	Reasons for Differences
<ol style="list-style-type: none"> <li>1. The annual general meeting shall be convened at least once a year and it is to be convened within six months after the end of each fiscal year. The general meeting is convened by the board of directors.</li> <li>2. The general meeting shall be convened within the territory of the ROC. The general meeting that is to be convened outside the territory of the ROC should be submitted to the TPEX for approval within two days after the resolution of the board of directors or after the shareholder receiving the convening permission from the competent authority.</li> <li>3. Shareholders who hold more than 1% of the total number of issued shares may submit a proposal for discussion in writing or electronic form to the annual general meeting. The board of directors shall include the submitted proposals except for the following: The proposal submitted by a shareholder who has less than 1% of the total number of issued shares, the proposal is not a resolution to be deliberated by shareholders in the general meeting, the proposal is proposed exceeding the announced acceptance period, the proposal contains more than 300 words, or more than</li> </ol>	<p>Regarding the extraordinary general meeting convened outside the ROC by shareholders, since shareholders may convene and preside over an extraordinary general meeting without the permission of the competent authorities of the Cayman Islands, article 19.7 of the issuer's articles of association only provides that the approval of TPEX in advance is necessary. TPEX's approval within two days after the shareholder receiving the convening permission from the competent authority required by "important matters concerning the protection of shareholders' equity" is not a requirement.</p>



Important matters concerning the protection of shareholders' equity	Reasons for Differences
<p>one proposal is proposed. Shareholders' proposals that are for urging the company to promote public interests or fulfill social responsibilities may be included for shareholders' deliberation by the board of directors.</p> <p>4. A shareholder who holds more than 3% of the total number of issued shares for more than one year continuously may request the board of directors to convene an extraordinary general meeting by stating the proposed matters and reasons in writing. If the board of directors does not deliver a notice to convene within 15 days after receiving the request, the shareholders may report to the competent authority to have the general meeting convened.</p> <p>5. Shareholders who hold more than 50% of the total number of issued shares for more than three consecutive months may convene an extraordinary general meeting. The calculation of the shareholding period and number of shares held by shareholders is based on the shares held at the time of book-entry closing date.</p> <p>6. The following matters and contents are required to be specified in the "reasons for convening the general meeting" of the meeting notice, which shall not be raised by an extemporary motion. The following material contents may be published on the website designated by the competent securities authority or the company; also, the said website should be stated in the meeting notice:</p> <ol style="list-style-type: none"> <li>(1) Election or discharge of directors and supervisors;</li> <li>(2) Alteration of the articles of association;</li> <li>(3) Reduction of capital;</li> <li>(4) Applying for the approval of ceasing its status as a public company;</li> <li>(5) Company dissolution, merger, share swap, and spin-off;</li> <li>(6) Entering into, amending, or terminating any contract for lease of the company's business in whole, or for entrusted business, or for regular joint operation with others;</li> <li>(7) Transferring the whole or any essential part of the business or assets;</li> <li>(8) Acquiring another's whole business or assets, which having great impacts on the business operation of the company;</li> </ol>	

Important matters concerning the protection of shareholders' equity	Reasons for Differences
<p>(9) Issuance of equity-linked securities through private placement;</p> <p>(10) Permission for director's engaging in any business within the scope of the company's business;</p> <p>(11) Distribution of dividends and bonuses in whole or in part with new shares issued;</p> <p>(12) Distribute legal reserve capital and additional paid-in capital earned by issuing new shares at a premium or by endowments received to the original shareholders with new shares or in cash.</p>	
<p>The company shall prepare the general meeting Handbook, and release the same 21 days before the annual general meeting or 15 days before the extraordinary general meeting along with other meeting related materials.</p>	<p>Regarding release of the general meeting Handbook and other meeting related materials, according to article 20.4 of the issuer's articles of association, the board of directors shall prepare the general meeting Handbook and supplementary materials in accordance with the regulations of public companies, and mail the same to shareholders or make available to all shareholders by other means; also, should have it uploaded to the Market Observation Post System in accordance with the regulations of public companies. The aforementioned "regulations of public company" includes the "Regulations Governing Content and Compliance Requirements for Handbook for General Meeting of Public Companies," which also provides in article 6-2 that "(the company shall) have meeting information released 21 days before the annual general meeting or 15 days before the extraordinary general meeting." Therefore, although the details of the timeline for sending meeting notices is not specified in the issuer's articles of association in accordance with the "important matters concerning the protection of shareholders' equity," the release of the Handbooks and other meeting related materials should be handled in accordance with the regulations of public company (including the "Regulations Governing Content and Compliance Requirements for Handbook for General Meeting of Public Companies,") as stated in the preceding paragraph. Therefore, article 20.4 of the issuer's articles of association is in compliance with the "important matters concerning the protection of shareholders' equity."</p>
<ol style="list-style-type: none"> <li>1. When the company holds a general meeting, it shall adopt a method of exercise of voting rights by electronic means.</li> <li>2. When voting rights are exercised by way of a written ballot or by electronic means, the</li> </ol>	<p>For shareholders' exercising their voting rights by way of a written ballot or by electronic means, according to the explanations of the attorney in the Cayman Islands, regarding the provision "A shareholder exercising voting rights by way of a</p>

Important matters concerning the protection of shareholders' equity	Reasons for Differences
<p>method of exercise shall be specified in the shareholders meeting notice. A shareholder exercising voting rights by way of a written ballot or electronic means will be deemed to have attended the meeting in person, but to have waived his/her rights with respect to the extemporary motions and amendments to original proposals of that meeting.</p> <p>3. A shareholder intending to exercise voting rights by way of a written ballot or by electronic means shall deliver a written declaration of intent to the company two days before the date of the general meeting. When duplicate declarations of intent are delivered, the one served first shall prevail, except when a declaration is made to cancel the earlier declaration of intent.</p> <p>4. After a shareholder has exercised voting rights by way of a written ballot or by electronic means, in the event the shareholder intends to attend the general meeting in person, a written declaration of intent to revoke the voting rights already exercised under the preceding paragraph shall be made known to the company, by the same means by which the voting rights were exercised two days before the date of the general meeting. If the notice of revocation is submitted after that time, the voting rights already exercised by way of a written ballot or by electronic means shall prevail.</p> <p>5. A shareholder who has a personal interest in the matter under discussion at a meeting, which may impair the interest of the company, shall not vote nor exercise the voting right on behalf of another shareholder. The number of shares for which voting rights may not be exercised under the preceding paragraph shall not be counted in determining the number of votes of the shareholders present at the meeting.</p> <p>6. Except in the circumstances otherwise provided for in the articles of association, a shareholder shall have one voting power in respect of each share in his/her/its possession.</p> <p>7. The shares shall have no voting power under any of the following circumstances. The number of shares for which voting rights may not be exercised shall not be calculated as issued and outstanding shares:</p> <p>(1) The share(s) of a company that are held by the issuing company itself in accordance with the laws;</p>	<p>written ballot or by electronic means will be deemed to have attended the meeting in person,” is not stipulated in the law of the Cayman Islands. Thus, the foregoing methods will not be deemed as attending the meeting in person. Instead, it is suggested to have the chairman of the general meeting appointed as his proxy to vote and proxies obtained by the chairman of the general meeting is exempted from the limit of proxy power of 3% of the total outstanding voting shares. Article 25.4 of the issuer’s articles of association provides that “A Member who exercises his voting power at a general meeting by way of a written ballot or by electronic transmission shall be deemed to have appointed the chairman of the general meeting as his proxy to vote his shares at the general meeting only in the manner directed by his written instrument or electric document,” rather than “shareholders exercising voting rights by way of a written ballot or by electronic means will be deemed to have attended the meeting in person” as stipulated in the “important matters concerning the protection of shareholders’ equity.” It is also stipulated in article 26.2 of the issuer’s articles of association that the proxies obtained by the chairman of the general meeting is exempted from the limit of proxy power of 3% of the total outstanding voting shares.</p>

Important matters concerning the protection of shareholders' equity	Reasons for Differences
<p>(2) The shares of a holding company that are held by its subordinate company, where the total number of voting shares or total shares equity held by the holding company in such a subordinate company represents more than one half of the total number of voting shares or the total shares equity of such a subordinate company.</p> <p>(3) The shares of a holding company and its subordinate company(ies) that are held by another company, where the total number of the shares or total shares equity of that company held by the holding company and its subordinate company(ies) directly or indirectly represents more than one half of the total number of voting shares or the total share equity of such a company.</p>	
<p>1. In the event any of the following resolutions are adopted at a general meeting, any shareholder makes his objection to such matter may request the company to purchase his shares:</p> <p>(1) Company dissolution, merger, share swap, and spin-off</p> <p>(2) Company enters into, amends, or terminates any contract for lease of the company's business in whole, or for entrusted business, or for regular joint operation with others, or transfers the whole or any essential part of the business or assets, or acquires another's whole business or assets, which having great effect on the business operation of the company.</p> <p>2. A shareholder claims for the rights stipulated in the preceding paragraph shall send a notice to the company in writing and specify his offered price within twenty (20) days following the adoption of resolution at the general meeting. If the company and such shareholder agree on the offered price, the company shall pay for all of his shares within ninety (90) days following the adoption of resolution at the general meeting. If not, the company shall pay its proposed fair price to such shareholder within ninety (90) days following the adoption of resolution at the general meeting. Failing to make any payment will be deemed that the company have accepted the offered price specified by the shareholder.</p>	<p>Regarding 1. a shareholder voting against the motion in respect of spin-off, merger, acquisition, share swap, and may request the company to purchase his shares and 2. shares being abstained from voting shall not be counted in determining the number of votes of the shareholder present at the said meeting, the issuer will propose to shareholders in 2023 annual general meeting to adopt revisions of article 27.2 of issuer's articles of association to comply with the "important matters concerning the protection of shareholders' equity" amended and announced on January 17, 2023.</p>

Important matters concerning the protection of shareholders' equity	Reasons for Differences
<p>3. A shareholder voting against the motion or abstained from voting in respect of such matter may request the company to purchase his shares pursuant to the reason stipulated in the first subparagraph of the first paragraph. Where the company fails to reach an agreement with the shareholder on the offered price within sixty (60) days following the adoption of resolution at the general meeting, the company shall file a petition with the court against all the dissenting shareholders to determine the purchase price within thirty (30) days following the end of negotiation. Taipei District Court, ROC may be the court of competent jurisdiction.</p> <p>4. Shares of a shareholder abstained from voting shall not be counted in determining the number of votes of the shareholder present at the said meeting.</p>	
<p>A company shall not do any of the following acts without a resolution adopted by a majority of the shareholders present who represent two-thirds or more of the total number of its outstanding shares. If the total number of shares represented by the shareholders present at shareholders meeting is not sufficient to meet the criteria specified above, the resolution to be made thereto may be adopted by two-thirds or more of the attending shareholders who represent a majority of the total number of its outstanding shares:</p> <ol style="list-style-type: none"> <li>1. Enter into, amend, or terminate any contract for lease of the company's business in whole, or for entrusted business, or for regular joint operation with others; transfer the whole or any essential part of its business or assets; or acquire another's whole business or assets, which has great effect on the business operation of the company.</li> <li>2. Alteration of the articles of association;</li> <li>3. For any modification or alteration in the articles of association prejudicial to the privileges of preferred shareholders, a resolution is to be resolved in the general meeting convened for preferred shareholders.</li> <li>4. Distribution of dividends and bonuses in whole or in part with new shares issued;</li> <li>5. Resolution of dissolution, merger, or spin-off;</li> <li>6. Issuance of employee restricted shares;</li> <li>7. Share swap.</li> </ol>	<ol style="list-style-type: none"> <li>1. Regarding the resolutions passed in the general meeting, in addition to the ordinary resolutions and supermajority resolutions under the laws of Taiwan, "Special Resolution" set forth under article 1.1 of the issuer's articles of association is provided in Cayman Islands Company Act. It refers to a resolution passed by the votes cast by a majority of at least two-thirds of the voting rights represented by the shareholders present at the meeting, which includes the shareholders voting in person, by proxy, or by the representatives authorized by the corporate shareholders or legal person shareholders; provided that, such resolution will not violate applicable laws.</li> <li>2. According to the Company Act of the Cayman Islands, the following matters shall be resolved in accordance with the Special Resolutions of the Cayman Islands: <ol style="list-style-type: none"> <li>(1) Amendments to the articles of association: According to the laws of the Cayman Islands, the amendment to the articles of association should be made in accordance with the Special Resolutions stipulated in the Company Act of the Cayman Islands. Therefore, the resolution thresholds for making amendments to organizational documents and articles of association stipulated in article 12.2 of issuer's articles of association is not based on the "supermajority resolution" set forth in the "important matters concerning the protection of shareholders' equity" stipulated in the laws of</li> </ol> </li> </ol>

Important matters concerning the protection of shareholders' equity	Reasons for Differences
	<p>Taiwan. In addition, according to article 13 of the issuer's articles of association, if any amendment to the articles of association impairs the rights of preferred shareholders, in addition to the resolution passed by a Special Resolutions stipulated in the Company Act of the Cayman Islands in the general meeting, it must be approved by the preferred shareholders with the Special Resolutions stipulated in the Company Act of the Cayman Islands in the preferred shareholders general meeting.</p> <p>(2) Dissolution:  According to the laws of the Cayman Islands, if the company decides to be liquidated and dissolved voluntarily because the company is unable to pay its debts as they fall due, the dissolution must be resolved in the general meeting. Notwithstanding the foregoing, if it is a voluntary dissolution for a reason otherwise stated above, the dissolution shall be resolved in accordance with the Special Resolutions of the Company Act of the Cayman Islands. Therefore, the resolution threshold for voluntary dissolution due to a reason other than insolvency as stated in article 12.4 of the issuer's articles of association has not been changed to the "Supermajority Resolutions" under the law of Taiwan in accordance with the requirement of the "important matters concerning the protection of shareholders' equity."</p> <p>(3) Merger:  The Company Act of the Cayman Islands has mandatory requirements for voting on a "merger as defined by the laws of the Cayman Islands," which is stipulated in article 12.3(b) of the issuer's articles of association that a "merger" (subject to the requirement of complying with article 12.2 (e) of the articles of association) shall be resolved in accordance with the "Supermajority Resolutions" under the law of Taiwan.</p> <p>The difference between the aforementioned matters and the "Checklist for the Protection of Shareholders' Equity at Where the Foreign Issuers Registered" is that the important matters in the "important matters concerning the protection of shareholders' equity" that are to be resolved in accordance with the "Supermajority Resolutions" are to be resolved separately in accordance with the "Supermajority Resolutions" and "Special Resolutions" of the Cayman Islands as stated in the</p>

Important matters concerning the protection of shareholders' equity	Reasons for Differences
	<p>issuer's articles of association, as the case maybe. Since such difference results from the law of the Cayman Islands and the "Supermajority Resolutions" matters as set forth in the "important matters concerning the protection of shareholders' equity" has been illustrated in the Supermajority Resolutions of the issuer's articles of association and the Special Resolutions of the Cayman Islands; therefore, the issuer's articles of association should have limited impact on shareholders' equity.</p>
<ol style="list-style-type: none"> <li>1. The term of office of a director shall not exceed three years; but he/she may be eligible for re-election.</li> <li>2. In the process of electing directors and supervisors at a general meeting, the number of votes exercisable in respect of one share shall be the same as the number of directors and supervisors to be elected, and the total number of votes per share may be consolidated for election of one candidate or may be split for election of two or more candidates. The ballots received by a candidate represent a prevailing number of votes shall be deemed a director-elect.</li> <li>3. A director may be discharged at any time by a resolution adopted at a general meeting.</li> </ol>	<p>There is no corresponding concept of "supervisor" according to the laws of the Cayman Islands. The Company has an Audit Committee; therefore, there is no relevant provision related to supervisors in the issuer's articles of association.</p>
<ol style="list-style-type: none"> <li>1. A director who has a personal interest in the matter under discussion at a meeting of the board of directors shall declare the nature of and the essential contents of his interest at the relevant meeting of the board of directors. Where the matters to be discussed at the meetings of the board of directors and general meeting pertaining to spin-off, merger or acquisition, a director who has a personal interest in the matter shall declare the nature of and the essential contents of his interest and reasons approving or disapproving such matter to the board of directors and the shareholders. In addition, such essential contents of personal interest and reasons approving or disapproving of the spin-off, merger or acquisition shall be stated in the notice of the general meeting. The aforesaid contents may be posted on the website designated by competent securities authority in the ROC or the Company and the website shall be stated in the notice.</li> <li>2. Where the spouse, a blood relative within the second degree of kinship of a director, or any company which has a controlling or subordinate relationship with a director has</li> </ol>	<p>Regarding the essential contents of personal interest and reasons approving or disapproving of the spin-off, merger or acquisition shall be stated in the notice of the general meeting and may be posted on the website designated by competent securities authority in the ROC or the Company and the website shall be stated in the notice, the issuer will propose to shareholders in 2023 annual general meeting to adopt revisions of article 46.3 of issuer's articles and association to comply with the "important matters concerning the protection of shareholders' equity" amended and announced on January 17, 2023.</p>

Important matters concerning the protection of shareholders' equity	Reasons for Differences
<p>interests in the matters under discussion in the meeting prescribed in the preceding paragraph, such director shall be deemed to have a personal interest in the matter.</p> <p>3. A director who has a personal interest in the matter under discussion at a meeting of the board of directors, which may conflict with and impair the interest of the company, shall not vote nor exercise voting rights on behalf of another director; the voting right of such director who cannot vote or exercise any voting right as prescribed above shall not be counted in the number of votes of directors present at the board meeting.</p>	
<ol style="list-style-type: none"> <li>1. Supervisors of a company shall be elected by the general meeting, among them at least one supervisor shall have a domicile within the territory of the ROC.</li> <li>2. The term of office of a supervisor shall not exceed three years; but he/she may be eligible for re-election.</li> <li>3. In case all supervisors of a company are discharged, the board of directors shall, within 60 days, convene an extraordinary general meeting to elect new supervisors.</li> <li>4. Supervisors shall supervise the execution of business operations of the company, and may at any time investigate the business and financial conditions of the company, inspect, transcribe or make copies of the accounting books and documents, and request the board of directors or managerial officers to make reports thereon.</li> <li>5. Supervisors shall audit the various statements and records prepared by the board of directors for submission to the general meeting, and shall make a report of their findings and opinions at the shareholders meeting.</li> <li>6. To facilitate the performance of duties, Supervisors may appoint a certified public accountant and attorney to conduct the auditing on their behalf.</li> <li>7. Supervisors of a company may attend the meeting of the board of directors to express their opinions. In case the board of directors or any director violates the laws, regulations, the articles of association, or the resolutions of the shareholders meeting when carrying out their duties, the supervisors shall forthwith advise, by a notice, to the board of directors or the violating director, as the case may be, to cease such act.</li> </ol>	<p>There is no corresponding concept of "supervisor" according to the laws of the Cayman Islands. The Company has an Audit Committee; therefore, there is no relevant provision related to supervisors in the issuer's articles of association.</p>



Important matters concerning the protection of shareholders' equity	Reasons for Differences
<p>8. Supervisor may each exercise the supervision power individually.</p> <p>9. A supervisor shall not be concurrently a director, a managerial officer, or other staff/employee of the company.</p>	
<p>1. Shareholder(s) who has/have been continuously holding 1% or more of the total number of the outstanding shares of the company more than six consecutive months may request in writing the supervisors of the company to initiate, for the company, an action against a director of the company in the Taiwan Taipei District Court, the court of competent jurisdiction.</p> <p>2. In case the supervisors fail to initiate an action within 30 days after having received the request, the shareholders may initiate the action for the company in the Taiwan Taipei District Court, the court of competent jurisdiction.</p> <p>3. Apart from the situation where the board of directors is reluctant or unable to convene a general meeting, supervisors may, for the benefit of the company, convene a general meeting when necessary.</p>	<p>There is no corresponding concept of “supervisor” according to the laws of the Cayman Islands. Therefore, article 5.2 of issuer’s articles of association stipulated that, to the extent permitted under the laws of the Cayman Islands, shareholders who continuously holding more than 1% of the total issued shares of the company for more than six consecutive months may directly file a lawsuit against the directors for the company, that is different from the requirement of the “important matters for the protection of the shareholders’ equity,” which requires the shareholder to request the supervisors in writing to file a lawsuit against the directors for the company and then if the supervisors fail to initiate an action within 30 days after having received such request, the shareholders may initiate the action for the company.</p> <p>In addition, the attorneys in the Cayman Islands remind the following matters in response to the aforementioned provisions in accordance with the laws of the Cayman Islands:</p> <p>According to the Company Act of the Cayman Islands, there is no specific norm allowing minority shareholders to bring derivative proceedings against directors in the courts of the Cayman Islands.</p> <p>In addition, the “articles of association” is not a contract between shareholders and directors, but an agreement between shareholders and the company. Therefore, even the articles of association allows minority shareholders to bring derivative lawsuits against directors, the attorneys in the Cayman Islands believe that such provision is not binding the directors. However, under common law, all shareholders (including minority shareholders) have the right to bring derivative actions (including actions against directors) regardless of their shareholding ratio and holding period. Once a lawsuit is filed by a shareholder, the Cayman Islands court is to decide whether the shareholder can proceed with the lawsuit or not at its own discretion. In other words, even though it is so stated in the articles of association that minority shareholders (or shareholders with the required shareholding ratio and holding period) may bring proceedings against the directors on behalf of the company, it is the decision of the Cayman Islands court whether the</p>

Important matters concerning the protection of shareholders' equity	Reasons for Differences
	<p>proceedings can proceed or not. According to the relevant judgment made by the Grand Court of the Cayman Islands, the continuance of the lawsuit depends on whether the Cayman Islands court believes and accepts that the claim of the plaintiff on behalf of the company is substantive, the alleged wrongful doing is indeed committed by persons who have controlling power over the company and who are able to prevent the company from suing against him/her. The Cayman Islands court will have decisions made on a case-by-case basis (although the court may refer to the provisions of the company's articles of association, but it is not decisive).</p> <p>According to the law of the Cayman Islands, the board of directors shall decide on behalf of the company taking as a whole (not as an individual director). Therefore, the board of directors shall resolve to authorize a director to bring lawsuits against other directors on behalf of the company.</p> <p>The Company Act of the Cayman Islands does not expressly permit shareholders to request the directors to convene a board meeting in order to resolve specific matters. However, the Company Act of the Cayman Islands does not prohibit companies from making provisions in their articles of association related to the rules of procedures for the board of directors (including the requirements of convening board meetings).</p>
<ol style="list-style-type: none"> <li>1. The director of a company shall exercise duties of loyalty and due care of a good administrator when conducting the business operation of the company; and if he/she has violated any provision of the applicable laws and/or regulations and thus caused damage to the company, he/she shall be liable for the damage to the company. If a director profits from an act carried out on his/her own behalf or for another, the general meeting may, by a resolution, consider the earnings in such an act as earnings of the company.</li> <li>2. The director who has violated any provision of the applicable laws and regulations when conducting business operation and thus caused damage to others, he/she and the company shall be liable, jointly and severally, for the damage to others.</li> <li>3. The managerial officers and supervisors of the company shall bear the same responsibilities for damages as the directors</li> </ol>	<p>Article 47.2 of the articles of association stipulated that "Without prejudice and subject to the general directors' duties that a Director owe to the Company and its shareholders under common law principals and the laws of the Cayman Islands, a Director shall perform his fiduciary duties of loyalty and due care of a good administrator in the course of conducting the Company's business, and shall indemnify the Company, to the maximum extent legally permissible, from any loss incurred or suffered by the Company arising from breach of his fiduciary duties. If a Director has made any profit for the benefit of himself or any third party as a result of any breach of his fiduciary duties, the Company shall, if so resolved by the Members by way of an Ordinary Resolution, take all such actions and steps as may be appropriate and to the maximum extent legally permissible to seek to recover such profit from such relevant Director. If a Director has, in the course of conducting the Company's business, violated any laws or regulations that causes the Company to become liable for any compensation or damages to</p>

Important matters concerning the protection of shareholders' equity	Reasons for Differences
<p>of the company within the scope of performing their duties.</p>	<p>any person, such Director shall become jointly and severally liable for such compensation or damages with the Company and if any reason such Director is not made jointly and severally liable with the Company, such Director shall indemnify the Company for any loss incurred or suffered by the Company caused by a breach of duties by such Director. The Officers, in the course of performing their duties to the Company, shall assume such duties and obligations to indemnify the Company in the same manner as if they are Directors.”</p> <p>However, the attorneys in the Cayman Islands remind the following matters in response to the aforementioned provisions in accordance with the laws of the Cayman Islands:</p> <p>The attorneys in the Cayman Islands believe that there is uncertainty on the provision of treating directors' benefit as an income of the company; therefore, its enforcement remains a question. For example, whether a director's breach of fiduciary duty should be determined by the court and how to define the benefit. The attorneys of the Cayman Islands also believe that this provision does not limit the liability of directors, in other words, directors still have various statutory responsibilities, common law responsibilities, and fiduciary duties under the Cayman Islands law. A director's duties owed to the company can approximately be clarified as common law responsibilities (that is, duties of exercising professional competence, awareness, due diligence) and fiduciary duties. However, directors also have statutory obligations according to applicable laws and are responsible for third parties (such as, creditors) under certain circumstances. If the company is insolvent or in danger of being insolvent, directors should take into account the interests of creditors when performing their duties.</p> <p>The “articles of association” is an agreement between the shareholders and the company; therefore, the directors are not the parties to the articles of association. The rights to claim for compensation for damages against directors due to their breaching due diligence should be set forth in the service contract.</p> <p>Under the law of the Cayman Islands, generally speaking, managerial officers or supervisors do not have the same responsibilities to a company or shareholders as directors. However, if managerial officers or supervisors are authorized to act on behalf of senior executives, they will have the same obligations as directors of the company. In general, the companies in the Cayman Islands will set forth</p>

Important matters concerning the protection of shareholders' equity	Reasons for Differences
	<p>the responsibilities and obligations of the managerial officers or supervisors to the company and shareholders in their service contracts in order to avoid doubts and disputes.</p> <p>Also, since the “articles of association” is an agreement between the shareholders and the company, the managerial officers or supervisors are not parties to the articles of association; therefore, the rights to claim for compensation for damages against managerial officers or supervisors due to their breach of due diligence should be set forth in the service contract.</p> <p>With regard to the laws of the Cayman Islands, since the “articles of association” is an agreement between the shareholders and the company, the directors (as directors of the issuing company) are not parties to the articles of association; therefore, the attorneys of the Cayman Islands believe that this provision is not binding the directors. If the issuing company wishes to make the relevant clauses contractually effective against the directors, the attorneys of the Cayman Islands believe that the relevant rights should be set forth in the contract with each director independently, for example, signing a service contract.</p>

V. Occurrences of the matters listed in Article 36, Paragraph 3, Subparagraph 2 of the Securities and Exchange Act that significantly affect shareholders' equity or security price, in the most recent year or as of the annual report publication date:

1. GCS signed a strategic cooperation agreement with Epistar Corporation (Epistar) in January 2019. Unikorn Semiconductor Corp. (Unikorn), a 100%-owned subsidiary of Epistar, provides the 6-inch wafer foundry services to GCS, and GCS and its subsidiaries will provide the III-V group compound semiconductor process technical support in return. GCS had acquired 16.4 million ordinary shares at NT\$10 per share in 2019 Q1 for a shareholding ratio of 14.09%. Later on, GCS had participated in the cash capital increase of Unikorn in January 2020 and August 2021 with 40 million ordinary shares acquired at NT\$10 per share, respectively. Afterwards, in March and December 2022, GCS participated in the cash capital increase of Unikorn and acquired 30 million and 5 million ordinary shares at a price of NTD 20 per share, respectively. As of the annual report publication date, GCS holds a 42.06% stake in Unikorn.
2. The board of directors of GCS Holdings, Inc. had resolved on December 9, 2019 to invest in Changzhou NEO-EPISKY Co., Ltd. (Changzhou NEO-EPISKY) with RMB 110 million invested on May 11, 2020. Changzhou NEO-EPISKY completed the industrial and commercial registration in August 2020 to have its name changed to Changzhou Chemsemi Co., Ltd. (Changzhou Chemsemi). The Audit Committee and the board of directors of GCS Holdings, Inc. had resolved on August 6, 2021 to participate in the cash capital increase of Changzhou ChemSemi with RMB 200 million invested. The Audit Committee and the board of directors of GCS Holdings, Inc. had resolved on October 22, 2021 to change the investment in Changzhou ChemSemi that was originally approved on

August 6, 2021 due to the equity transfer proposed by the original shareholder for an amount of RMB 43,356,430.17, resulting in the direct investment in Changzhou ChemSemi decreased from RMB 200 million to RMB 156 million, and the total cumulative investment after the change was RMB 199,356,430.17. GCS has signed a cash capital increase agreement with Changzhou ChemSemi in 2021 Q4. In February and October 2022, GCS invested RMB 100 million and RMB 56 million, respectively, in Changzhou ChemSemi. Furthermore, GCS acquired equity in Changzhou ChemSemi from the original shareholders in November 2022, for a total amount of RMB 43,356 thousand, and used a portion of its existing Changzhou ChemSemi equity as collateral for the payment of the transfer price. As of the annual report publication date, the company holds a 24.21% stake in Changzhou ChemSemi.

3. The shareholders meeting of GCS had resolved on July 2, 2021 to raise fund with ordinary shares issued for not more than 20,000 thousand shares in accordance with the relevant law and regulations, which included the following alternatives to be implemented independently or in combination: Issuing ordinary shares in a lump sum or installments for domestic cash capital increase, and/or, issuing ordinary shares for cash capital increase to participate in the issuance of Global Depositary Receipts (GDR), and/or, issuing common stock through private placement for cash capital increase, or, issuing new shares to participate in the issuance of Global Depositary Receipts (GDR), or issuing domestic or overseas convertible corporate bonds. The issuance of ordinary shares through private placement for cash capital increase was resolved in the special shareholders meeting on December 10, 2021; and GCS had completed the issuance of 20,000 thousand ordinary shares through private placement within the aforementioned threshold of issuance amount. Therefore, GCS had this case cancelled according to the resolution of the board of directors on February 23, 2022.
4. The special shareholders meeting of GCS had resolved on December 10, 2021 to have ordinary shares issued through private placement for cash capital increase. The said issuance of ordinary shares was arranged within the threshold of 20,000 thousand shares, which included the shares issued for the long-term fundraising proposal as resolved in the shareholders meeting on July 2, 2021. Please refer to pages 148-151 of this annual report for detailed instructions regarding the handling of this private placement case.
5. The shareholders meeting of GCS had resolved on May 20, 2022 to raise fund with ordinary shares issued for not more than 20,000 thousand shares in accordance with the relevant law and regulations, which included the following alternatives to be implemented independently or in combination: Issuing ordinary shares through private placement in a lump sum or installments for cash capital increase, or, issuing new shares to participate in the issuance of Global Depositary Receipts (GDR), or issuing domestic or overseas convertible corporate bonds. When domestic or overseas convertible corporate bonds are issued through private placement, the number of ordinary shares to be converted from the convertible corporate bonds shall be calculated at the conversion price under the precondition of total issued shares not exceeding 20,000 thousand shares. The purpose of the current fundraising project is for the replenishment of working capital, reinvestment, sinking funds, and others in order to expand the scale of operations and to enhance the Company's competitiveness and financial structure. The aforementioned case has not been processed after the resolution of the shareholders' meeting in 2022. Given that the one-year processing period will soon expire and implementation of private placement is no longer feasible and practical under the current market conditions, the board of directors of GCS Holdings, Inc. resolved on February 20, 2023 to terminate the proposed private placement.

**GCS HOLDINGS, INC. AND SUBSIDIARIES**  
**CONSOLIDATED FINANCIAL STATEMENTS AND**  
**INDEPENDENT AUDITORS' REPORT**  
**DECEMBER 31, 2022 AND 2021**

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For the convenience of readers and for information purpose only, the 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. In the event of any discrepancy between the English version and the original Chinese version or any differences in the interpretation of the two versions, the Chinese-language auditors' report and consolidated financial statements shall prevail.

## INDEPENDENT AUDITORS' REPORT TRANSLATED FROM CHINESE

To GCS Holdings, Inc.

### ***Opinion***

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

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 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 the International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations that came into effect as endorsed by the Financial Supervisory Commission.

### ***Basis for opinion***

We conducted our audits in accordance with the Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants and Standards on Auditing of the Republic of China. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the consolidated Financial Statements* section of our report. We are independent of the Group in accordance with 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 judgement, were of most significance in our audit of the Group's 2022 consolidated financial statements. These matters were addressed in the context of our audit of the consolidated financial statements as a whole and, in forming our opinion thereon, we do not provide a separate opinion on these matters. Key audit matters for the Group's 2022 consolidated

financial statements are stated as follows:

*Key Audit Matter – Sales revenue recognition*

Description

Please refer to Note 4(22) for accounting policies of revenue recognition. Please refer to Note 6(20) for description of revenue.

The Group primarily engages in the manufacturing and selling of compound semiconductor wafers and advanced optoelectronics technology products. Among the operating revenue of NT\$1,333,810 thousands for the year ended December 31, 2022, sales revenue generated from compound semiconductor wafers and advanced optoelectronics technology products amounted to NT\$1,333,176 thousands, representing 99% of total operating revenue. The Group's customers include wireless devices and fiber-optic communication providers in China, U.S.A., Taiwan and etc., and sales terms vary based on market conditions and customer needs in different regions. Considering that sales revenue are the main transactions of the Group, which has significant effect on the consolidated financial statements and requires substantial amount of time and resources for validation, we identified the audit of sales revenue recognition as one of the key audit matters.

How our audit addressed the matter

The major audit procedures regarding sales revenue recognition were as follows:

1. Evaluated the design and operating effectiveness of internal controls relevant to sales revenue recognition.
2. Sampled and tested sales transactions by inspecting customers' purchase orders, documents regarding transfer of control, invoices billed and accounting vouchers to validate the occurrence and accuracy of sales transactions.
3. Performed test of sales transactions within a defined period before and after the balance sheet date in order to verify whether the sales transactions were recorded in the appropriate periods.
4. Performed confirmation procedures and subsequent receipt testing for sampled accounts receivable.



## *Key Audit Matter – Assessment of allowance for valuation of inventory*

### Description

Please refer to Note 4(9) for description of accounting policies on allowance for inventory valuation. Please refer to Note 5(2) for accounting estimates and assumption uncertainty on evaluation of inventory. Please refer to Note 6(3) for description of allowance for inventory valuation.

The Group primarily engages in the manufacturing and selling of compound semiconductor wafers and advanced optoelectronics technology products. Due to rapid technological innovations, intense market competition and fluctuations in market prices, there is a higher risk of inventory losses resulted from market value decline or obsolescence. The Group used net realizable value to make provisions for estimated loss related to inventories aged over a certain period and individually identified as obsolete. The aforementioned identification of obsolete inventories and net realizable value are subject to management's judgment. Considering that the Group's inventory and allowance for inventory valuation have a significant impact on the Group's consolidated financial statements, we identified the assessment of allowance for valuation of inventory as one of the key audit matters.

### How our audit addressed the matter

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

1. Assessed the reasonableness of accounting policies and procedures in relation to allowance for inventory valuation.
2. Validated the appropriateness of inventory aging report used by management to ensure that the information in the inventory aging report is consistent with the corresponding accounting policies.
3. Obtained net realizable value calculation report prepared by management, sampled inventory items and checked whether purchase or sales documents corresponded to records and recalculated the net realizable value calculation for accuracy. Performed the aforementioned audit procedures to assess the reasonableness of recognized inventory valuation fluctuations.

### ***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 the International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations that came into effect as endorsed by the Financial Supervisory Commission, 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 audit committee, are responsible for overseeing the Group's financial reporting process.

### ***Auditor's responsibilities for the audit of the consolidated financial statements***

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Standards on Auditing of 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 Standards on Auditing of the Republic of China, we exercise professional judgment and 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 auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
5. Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
6. Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's 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.

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Bai, Shu-Chien Pai

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Cheng, Ya-Huei

For and on Behalf of PricewaterhouseCoopers, Taiwan

February 20, 2023

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The accompanying consolidated financial statements are not intended to present the financial position and results of operations and cash flows in accordance with accounting principles generally accepted in countries and jurisdictions other than the Republic of China. The standards, procedures and practices in the Republic of China governing the audit of such financial statements may differ from those generally accepted in countries and jurisdictions other than the Republic of China. Accordingly, the accompanying consolidated financial statements and independent auditors' report are not intended for use by those who are not informed about the accounting principles or auditing standards generally accepted in the Republic of China, and their applications in practice.

As the financial statements are the responsibility of the management, PricewaterhouseCoopers cannot accept any liability for the use of, or reliance on, the English translation or for any errors or misunderstandings that may derive from the translation.

**GCS HOLDINGS, INC. AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**  
**DECEMBER 31, 2022 AND 2021**  
(EXPRESSED IN THOUSANDS OF NEW TAIWAN DOLLARS)

Assets	Notes	December 31, 2022		December 31, 2021		
		AMOUNT	%	AMOUNT	%	
<b>Current assets</b>						
1100	Cash and cash equivalents	6(1)	\$ 442,196	10	\$ 1,839,765	37
1170	Accounts receivable, net	6(2)	199,516	4	155,873	3
1180	Accounts receivable - related party	6(2) and 7	2,958	-	2,913	-
1200	Other receivables		3,843	-	3,755	-
1210	Other receivables - related parties	7	5,984	-	15,754	-
1220	Current income tax assets		34,480	1	31,074	1
130X	Inventories	6(3)	338,168	7	280,451	6
1410	Prepayments		33,561	1	30,717	1
1470	Other current assets	8	33,314	1	29,960	1
11XX	<b>Total current Assets</b>		<u>1,094,020</u>	<u>24</u>	<u>2,390,262</u>	<u>49</u>
<b>Non-current assets</b>						
1517	Non-current financial assets at fair value through other comprehensive income	6(4)	1,397	-	-	-
1550	Investments accounted for using equity method	6(5) and 8	2,446,614	54	1,690,553	34
1600	Property, plant and equipment	6(6) and 8	695,667	15	575,485	12
1755	Right-of-use assets	6(7)	24,448	1	3,641	-
1780	Intangible assets	6(8)	56,678	1	94,366	2
1840	Deferred income tax assets	6(25)	127,852	3	103,784	2
1990	Other non-current assets	6(10) and 8	70,238	2	43,903	1
15XX	<b>Total non-current assets</b>		<u>3,422,894</u>	<u>76</u>	<u>2,511,732</u>	<u>51</u>
1XXX	<b>Total assets</b>		<u>\$ 4,516,914</u>	<u>100</u>	<u>\$ 4,901,994</u>	<u>100</u>

(Continued)

**GCS HOLDINGS, INC. AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**  
**DECEMBER 31, 2022 AND 2021**  
(EXPRESSED IN THOUSANDS OF NEW TAIWAN DOLLARS)

	Liabilities and Equity	Notes	December 31, 2022		December 31, 2021	
			AMOUNT	%	AMOUNT	%
<b>Current liabilities</b>						
2100	Short-term borrowings	6(11)	\$ 20,000	1	\$ 20,000	-
2130	Current contract liabilities	6(20)	12,516	-	21,752	1
2170	Accounts payable		7,810	-	1,682	-
2200	Other payables	6(12)	301,021	7	96,763	2
2220	Other payables - related parties	7	2,705	-	-	-
2230	Current income tax liabilities		220	-	42	-
2280	Current lease liabilities		8,273	-	3,393	-
2320	Long-term borrowings, current portion	6(13)	43,277	1	10,292	-
2399	Other current liabilities		9,758	-	984	-
21XX	<b>Total current liabilities</b>		<u>405,580</u>	<u>9</u>	<u>154,908</u>	<u>3</u>
<b>Non-current liabilities</b>						
2540	Long-term borrowings	6(13)	329,110	7	188,673	4
2570	Deferred income tax liabilities	6(25)	65,537	2	59,173	1
2580	Non-current lease liabilities		15,965	-	-	-
25XX	<b>Total non-current liabilities</b>		<u>410,612</u>	<u>9</u>	<u>247,846</u>	<u>5</u>
2XXX	<b>Total liabilities</b>		<u>816,192</u>	<u>18</u>	<u>402,754</u>	<u>8</u>
<b>Equity</b>						
	Share capital	6(16)				
3110	Common stock		1,108,251	24	1,106,761	23
	Capital surplus	6(17)				
3200	Capital surplus		2,825,143	63	2,937,329	59
	Retained earnings	6(18)				
3320	Special reserve		6,821	-	6,821	-
3350	Unappropriated retained earnings (Accumulated deficit)		( 229,734)	( 5)	715,327	15
	Other equity interest	6(19)				
3400	Other equity interest		( 9,759)	-	( 254,043)	( 5)
3500	Treasury stocks	6(16)	-	-	( 12,955)	-
3XXX	<b>Total equity</b>		<u>3,700,722</u>	<u>82</u>	<u>4,499,240</u>	<u>92</u>
	Significant contingent liabilities and unrecognized contract commitments	9				
	Significant events after the reporting period	11				
3X2X	<b>Total liabilities and equity</b>		<u>\$ 4,516,914</u>	<u>100</u>	<u>\$ 4,901,994</u>	<u>100</u>

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

**GCS HOLDINGS, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**  
**YEARS ENDED DECEMBER 31, 2022 AND 2021**  
(EXPRESSED IN THOUSANDS OF NEW TAIWAN DOLLARS, EXCEPT FOR LOSSES PER SHARE)

Items	Notes	Year ended December 31				
		2022		2021		
		AMOUNT	%	AMOUNT	%	
4000	Operating revenue	6(20) and 7	\$ 1,333,810	100	\$ 1,235,881	100
5000	Cost of operating revenue	6(3) and 7	( 1,018,881)	( 76)	( 890,824)	( 72)
5900	Net operating margin		<u>314,929</u>	<u>24</u>	<u>345,057</u>	<u>28</u>
	Operating expenses	6(23)(24)				
6100	Selling and marketing expenses		( 36,432)	( 3)	( 29,771)	( 2)
6200	General and administrative expenses		( 213,812)	( 16)	( 184,642)	( 15)
6300	Research and development expenses		( 175,008)	( 13)	( 160,583)	( 13)
6450	Net impairment loss on financial assets	12(2)	( 27,010)	( 2)	( 875)	-
6000	Total operating expenses		( 452,262)	( 34)	( 375,871)	( 30)
6900	Operating (loss) profit		( 137,333)	( 10)	( 30,814)	( 2)
	Non-operating income and expenses					
7100	Interest income		3,592	-	5,532	-
7010	Other income	6(13)	5,842	1	87,633	7
7020	Other gains and losses	6(21)	( 78,013)	( 6)	16,207	1
7050	Finance costs	6(22)	( 12,090)	( 1)	( 4,632)	-
7060	Share of net loss of associates and joint ventures accounted for using equity method	6(5)	( 733,699)	( 55)	( 461,136)	( 37)
7000	Total non-operating income and expenses		( 814,368)	( 61)	( 356,396)	( 29)
7900	<b>Loss before income tax</b>		( 951,701)	( 71)	( 387,210)	( 31)
7950	Income tax benefit	6(25)	11,984	1	8,713	1
8200	<b>Net loss for the year</b>		<u>(\$ 939,717)</u>	<u>( 70)</u>	<u>(\$ 378,497)</u>	<u>( 30)</u>
	<b>Other comprehensive income (loss)</b>					
	<b>Other comprehensive income (loss) components that will not be reclassified to profit or loss</b>					
8320	Share of other comprehensive income (loss) of associates and joint ventures accounted for using equity method, exchange differences on translation	6(5)	\$ 663	-	(\$ 1,285)	-
8361	Financial statements translation differences of foreign operations	6(19)	455,718	34	( 104,801)	( 9)
	<b>Components of other comprehensive loss that will be reclassified to profit or loss</b>					
8370	Share of other comprehensive loss of subsidiaries, associates and joint ventures accounted for using the equity method- financial statements translation differences of foreign operations	6(19)	( 209,545)	( 16)	( 3,142)	-
8300	<b>Total other comprehensive income (loss), net</b>		<u>\$ 246,836</u>	<u>18</u>	<u>(\$ 109,228)</u>	<u>( 9)</u>
8500	<b>Total comprehensive loss for the year</b>		<u>(\$ 692,881)</u>	<u>( 52)</u>	<u>(\$ 487,725)</u>	<u>( 39)</u>
	Loss attributable to:					
8610	Owners of the parent		<u>(\$ 939,717)</u>	<u>( 70)</u>	<u>(\$ 378,497)</u>	<u>( 30)</u>
	Total comprehensive loss attributable to:					
8710	Owners of the parent		<u>(\$ 692,881)</u>	<u>( 52)</u>	<u>(\$ 487,725)</u>	<u>( 39)</u>
	Losses per share	6(26)				
9750	Basic losses per share (in dollars)		<u>(\$ 8.53)</u>		<u>(\$ 4.20)</u>	
9850	Diluted losses per share (in dollars)		<u>(\$ 8.53)</u>		<u>(\$ 4.20)</u>	

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

GCS HOLDINGS, INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY  
YEARS ENDED DECEMBER 31, 2022 AND 2021  
(EXPRESSED IN THOUSANDS OF NEW TAIWAN DOLLARS)

	Equity Attributable To Owners Of The Parent								
	Notes	Retained Earnings			Other Equity Interest			Total	
		Common Stock	Capital Surplus	Special Reserve	Unappropriated Retained Earnings (Accumulated Deficit)	Financial Statements Translation Differences Of Foreign Operations	Unearned Compensation Costs		Treasury Stocks
<u>2021</u>									
Balance at January 1, 2021		\$ 914,058	\$ 1,703,520	\$ 6,821	\$ 1,144,997	(\$ 140,668)	(\$ 10,762)	(\$ 90,870)	\$ 3,527,096
Consolidated net loss for 2021		-	-	-	( 378,497 )	-	-	-	( 378,497 )
Other comprehensive loss for 2021	6(19)	-	-	-	( 1,285 )	( 107,943 )	-	-	( 109,228 )
Total comprehensive loss for 2021		-	-	-	( 379,782 )	( 107,943 )	-	-	( 487,725 )
Issuance of share capital-private placement		200,000	615,800	-	-	-	-	-	815,800
Compensation costs of share-based payment	6(15)(17)(19)	-	5,244	-	-	-	23,229	-	28,473
Issuance of restricted stocks to employees	6(15)(16)(17)(19)	4,270	16,732	-	-	-	( 21,002 )	-	-
Retirement of restricted stocks to employees	6(15)(16)(17)(19)	( 650 )	( 2,453 )	-	-	-	3,103	-	-
Exercise of employee stock options	6(15)(16)(17)	353	1,764	-	-	-	-	-	2,117
Retirement of treasury stocks	6(16)(17)	( 11,270 )	( 16,757 )	-	( 49,888 )	-	-	77,915	-
Recognized changes in equity of associates	6(17)	-	613,479	-	-	-	-	-	613,479
Balance at December 31, 2021		<u>\$ 1,106,761</u>	<u>\$ 2,937,329</u>	<u>\$ 6,821</u>	<u>\$ 715,327</u>	<u>(\$ 248,611)</u>	<u>(\$ 5,432)</u>	<u>(\$ 12,955)</u>	<u>\$ 4,499,240</u>
<u>2022</u>									
Balance at January 1, 2022		\$ 1,106,761	\$ 2,937,329	\$ 6,821	\$ 715,327	(\$ 248,611)	(\$ 5,432)	(\$ 12,955)	\$ 4,499,240
Consolidated net loss for 2022		-	-	-	( 939,717 )	-	-	-	( 939,717 )
Other comprehensive income for 2022	6(19)	-	-	-	663	246,173	-	-	246,836
Total comprehensive (loss) income for 2022		-	-	-	( 939,054 )	246,173	-	-	( 692,881 )
Compensation costs of share-based payment	6(15)(17)(19)	-	15,748	-	-	-	14,129	-	29,877
Issuance of restricted stocks to employees	6(15)(16)(17)(19)	4,450	16,039	-	-	-	( 20,489 )	-	-
Retirement of restricted stocks to employees	6(15)(16)(17)(19)	( 960 )	( 3,511 )	-	-	-	4,471	-	-
Exercise of employee stock options	6(15)(16)(17)	500	1,067	-	-	-	-	-	1,567
Retirement of treasury stocks	6(16)(17)	( 2,500 )	( 4,448 )	-	( 6,007 )	-	-	12,955	-
Recognized changes in equity of associates	6(17)	-	( 137,081 )	-	-	-	-	-	( 137,081 )
Balance at December 31, 2022		<u>\$ 1,108,251</u>	<u>\$ 2,825,143</u>	<u>\$ 6,821</u>	<u>(\$ 229,734)</u>	<u>(\$ 2,438)</u>	<u>(\$ 7,321)</u>	<u>\$ -</u>	<u>\$ 3,700,722</u>

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



GCS HOLDINGS, INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF CASH FLOWS  
YEARS ENDED DECEMBER 31, 2022 AND 2021  
(EXPRESSED IN THOUSANDS OF NEW TAIWAN DOLLARS)

	Notes	Years ended December 31	
		2022	2021
<b><u>CASH FLOWS FROM OPERATING ACTIVITIES</u></b>			
Loss before tax		(\$ 951,701 )	(\$ 387,210 )
Adjustments			
Adjustments to reconcile profit (loss)			
Net impairment loss on financial assets	12(2)	27,010	875
Depreciation	6(6)(7)(23)	124,528	112,165
Amortization	6(8)(23)	6,878	6,471
Interest expense	6(22)	12,090	4,632
Interest income		( 3,592 )	( 5,532 )
Compensation cost of share-based payment	6(15)	29,877	28,473
Gain on disposal of property, plant and equipment	6(21)	( 6,660 )	( 17,064 )
Payroll protection loan exempt income	6(13)	( 5,408 )	( 87,633 )
Share of net loss of associate and joint ventures accounted for using equity method	6(5)	733,699	461,136
Loss (gain) on disposal of investments	6(5)(21)	4,171	( 29,526 )
Gain on disposal of a subsidiary	6(21) and 7	-	( 12,890 )
Impairment loss on non-financial assets	6(21)	41,816	43,144
Changes in operating assets and liabilities			
Changes in operating assets			
Accounts receivable		( 57,295 )	34,976
Accounts receivable- related party		266	( 2,913 )
Other receivables		( 1,798 )	3,711
Other receivable- related parties		( 237 )	( 65 )
Inventories		( 26,419 )	72,420
Prepayments		( 101 )	1,415
Changes in operating liabilities			
Contract liabilities		( 11,273 )	7,441
Accounts payable		5,769	( 20,180 )
Other payables		6,802	( 18,060 )
Other payable- related parties		2,624	-
Other current liabilities		8,415	( 1,748 )
Cash (outflow) inflow generated from operations		( 60,539 )	194,038
Interest received		5,795	7,603
Interest paid		( 12,090 )	( 4,618 )
Income tax refund received		-	19,152
Income tax paid		( 400 )	( 411 )
Net cash flows (used in) from operating activities		( 67,234 )	215,764

(Continued)

GCS HOLDINGS, INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF CASH FLOWS  
YEARS ENDED DECEMBER 31, 2022 AND 2021  
(EXPRESSED IN THOUSANDS OF NEW TAIWAN DOLLARS)

	Notes	Years ended December 31	
		2022	2021
<u>CASH FLOWS FROM INVESTING ACTIVITIES</u>			
Acquisition of investments accounted for using the equity method	6(5)(27) and 7	(\$ 1,395,090 )	(\$ 540,680 )
Acquisition of property, plant and equipment	6(27)	( 232,273 )	( 133,157 )
Proceeds from disposal of property, plant and equipment	6(27)	49,046	103,471
Acquisition of intangible assets	6(8)	( 2,100 )	( 330 )
(Increase) decrease in other current assets		( 91 )	139,598
Decrease in other non-current assets		7	1,841
Disposal of a subsidiary-decrease in cash	6(27)	-	( 24,675 )
Net cash flows used in investing activities		( 1,580,501 )	( 453,932 )
<u>CASH FLOWS FROM FINANCING ACTIVITIES</u>			
Proceeds from short-term borrowings	6(28)	20,000	20,000
Repayments of short-term borrowings	6(28)	( 20,000 )	( 20,000 )
Proceeds from long-term borrowings	6(28)	175,680	204,143
Repayments of long-term borrowings	6(28)	( 26,042 )	( 42,973 )
Repayments of lease liabilities	6(28)	( 7,562 )	( 5,945 )
Proceeds from issuance of share capital - private placement	6(15)(16)	-	815,800
Proceeds from exercise of employee stock options		1,567	2,117
Net cash flows from financing activities		143,643	973,142
Effect of changes in exchange rates		106,523	( 1,685 )
Net (decrease) increase in cash and cash equivalents		( 1,397,569 )	733,289
Cash and cash equivalents at beginning of year	6(1)	1,839,765	1,106,476
Cash and cash equivalents at end of year	6(1)	\$ 442,196	\$ 1,839,765

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

GCS HOLDINGS, INC. AND SUBSIDIARIES  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
YEARS ENDED DECEMBER 31, 2022 AND 2021  
(EXPRESSED IN THOUSANDS OF NEW TAIWAN DOLLARS,  
EXCEPT AS OTHERWISE INFCATED)

1. HISTORY AND ORGANIZATION

GCS Holdings Inc. (the “Company”) was incorporated in the Cayman Islands on November 30, 2010, as a holding company for the purpose of registering its shares with the Taipei Exchange. The Company was approved by the Financial Supervisory Commission to be listed on the Taipei Exchange. The Company's common shares have been traded on the Taipei Exchange since September 15, 2014.

The Company and subsidiaries (collectively referred herein as the “Group”) are engaged in the manufacturing of compound semiconductor wafers and foundry related services as well as licensing of intellectual property. The Group is also engaged in the research, development, manufacture and sales of advanced optoelectronics technology products.

2. THE DATE OF AUTHORIZATION FOR ISSUANCE OF THE CONSOLIDATED FINANCIAL STATEMENTS AND PROCEDURES FOR AUTHORIZATION

These consolidated financial statements were authorized for issuance by the Board of Directors on February 20, 2023.

3. APPLICATION OF NEW STANDARDS, AMENDMENTS AND INTERPRETATIONS

(1) Effect of the adoption of new issuances of or amendments to International Financial Reporting Standards (“IFRSs”) that came into effect as endorsed by the Financial Supervisory Commission (“FSC”)

New standards, interpretations and amendments endorsed by FSC and became effective from 2022 are as follows:

New Standards, Interpretations and Amendments	International Accounting Standards Board (“IASB”)
Amendments to IFRS 3, ‘Reference to the conceptual framework’	January 1, 2022
Amendments to IAS 16, ‘Property, plant and equipment: proceeds before intended use’	January 1, 2022
Amendments to IAS 37, ‘Onerous contracts—cost of fulfilling a contract’	January 1, 2022
Annual improvements to IFRS Standards 2018–2020	January 1, 2022

The above standards and interpretations have no significant impact to the Group’s financial condition and financial performance based on the Group’s assessment.

(2) Effect of new issuances of or amendments to IFRSs as endorsed by the FSC that has not yet adopted the Group

New standards, interpretations and amendments endorsed by the FSC effective from 2023 are as follows:

New Standards, Interpretations and Amendments	Effective date by IASB
Amendments to IAS 1, 'Disclosure of accounting policies'	January 1, 2023
Amendments to IAS 8, 'Definition of accounting estimates'	January 1, 2023
Amendments to IAS 12, 'Deferred tax related to assets and liabilities arising from a single transaction'	January 1, 2023

The above standards and interpretations have no significant impact to the Group's financial condition and financial performance based on the Group's assessment.

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

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

New Standards, Interpretations and Amendments	Effective date by IASB
Amendments to IFRS 10 and IAS 28, 'Sale or contribution of assets between an investor and its associate or joint venture'	To be determined by IASB
Amendments to IFRS 16, 'Lease liability in a sale and leaseback'	January 1, 2024
IFRS 17, 'Insurance contracts'	January 1, 2023
Amendments to IFRS 17, 'Insurance contracts'	January 1, 2023
Amendment to IFRS 17, 'Initial application of IFRS 17 and IFRS 9 – 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

The above standards and interpretations have no significant impact to the Group's financial condition and financial performance based on the Group's assessment.

#### 4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated.

(1) Compliance statement

The consolidated financial statements of the Group have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers, International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations that came into effect as endorsed by the FSC (collectively referred herein as the "IFRSs and relevant laws and regulations").

(2) Basis of preparation

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

(3) Basis of consolidation

- A. Basis for preparation of consolidated financial statements:
- (a) All subsidiaries are included in the Group's consolidated financial statements. Subsidiaries are all entities controlled by the Group. The Group controls an entity when the Group is exposed, or has rights, to variable returns from its involvement with the entity and can affect those returns through its power over the entity. Consolidation of subsidiaries begins from the date the Group obtains control of the subsidiaries and ceases when the Group loses control of the subsidiaries.
- (b) Inter-company transactions, balances and unrealized gains or losses on transactions between companies within the Group are eliminated. Accounting policies of subsidiaries have been adjusted where necessary to ensure consistency with the policies adopted by the Group.
- (c) Profit or loss and each component of other comprehensive income are attributed to the owners of the parent and to the non-controlling interests. Total comprehensive loss is attributed to the owners of the parent and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.
- B. Subsidiaries included in the consolidated financial statements:

Name of investor	Name of subsidiary	Main business activities	Ownership (%)		Note
			December 31, 2022	December 31, 2021	
The Company	Global Communication Semiconductors, LLC	1. Manufacturing of compound semiconductor wafers and foundry related services as well as granting royalty rights for intellectual property 2. Manufacturing and selling of advanced optoelectronics technology products	100	100	-
The Company	GCS Device Technologies, Co., Ltd.	Product design and research development services	100	100	-
The Company	GCOM Semiconductor Co., Ltd.	Wholesaling and retailing of electronic components, product design, and outsourcing management services	100	100	-
The Company	Changzhou Galasemi Co., Ltd.	Manufacturing and selling of semiconductor discrete devices, and technical services, technical development and advisory services	-	-	(Note)

Name of investor	Name of subsidiary	Main business activities	Ownership (%)		Note
			December 31, 2022	December 31, 2021	
Global Communication Semiconductors, LLC	D-Tech Optoelectronics, Inc.	Developing, manufacturing and selling of photodiodes and avalanche photodiodes for telecommunication systems and data communication networks	100	100	-
D-Tech Optoelectronics, Inc.	D-Tech Optoelectronics (Taiwan) Corporation	Manufacturing, retailing and wholesaling of telecommunications devices, and manufacturing and wholesaling of electronic components	100	100	-

Note: The Company had disposed all the shares of Changzhou Galasemi Co., Ltd. in July 2021, therefore Changzhou Galasemi Co., Ltd. is no longer included in the Group's consolidated financial statements.

- C. Subsidiaries not included in the consolidated financial statements: None.
- D. Adjustments for subsidiaries with different balance sheet dates: None.
- E. Significant restrictions: None.
- F. Subsidiaries that have non-controlling interests that are material to the Group: None.

(4) Foreign currency translation

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The consolidated financial statements are presented in USD, which is the Company's functional and the Group's presentation currency.; however, the consolidated financial statements are presented in NTD.

A. Foreign currency transactions and balances

- (a) Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions are recognized in profit or loss in the period in which they arise.
- (b) Monetary assets and liabilities denominated in foreign currencies at the period end are re-translated at the exchange rates prevailing at the balance sheet date. Exchange differences arising upon re-translation at the balance sheet date are recognized in profit or loss.
- (c) Non-monetary assets and liabilities denominated in foreign currencies held at fair value through profit or loss are re-translated at the exchange rates prevailing at the balance sheet date; their translation differences are recognized in profit or loss. Non-monetary assets and liabilities denominated in foreign currencies held at fair value through other comprehensive income are re-translated at the exchange rates prevailing at the balance sheet date; their translation differences are recognized in other comprehensive income. However, non-monetary assets and liabilities denominated in foreign currencies that are not measured at fair value are translated using the historical exchange rates at the dates of the initial transactions.
- (d) All other foreign exchange gains and losses based on the nature of those transactions are presented in the statement of comprehensive income within 'other gains and losses'.

## B. Translation of foreign operations

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

- i. Assets and liabilities for each balance sheet presented are translated at the closing exchange rate at the date of that balance sheet;
- ii. Income and expenses for each statement of comprehensive income are translated at average exchange rates of that period; and
- iii. All resulting exchange differences are recognized in other comprehensive income (loss).

## (5) Classification of current and non-current items

A. Assets that meet one of the following criteria are classified as current assets; otherwise they are classified as non-current assets:

- (a) Assets arising from operating activities that are expected to be realised, or are intended to be sold or consumed within the normal operating cycle;
- (b) Assets held mainly for trading purposes;
- (c) Assets that are expected to be realised within twelve months from the balance sheet date;
- (d) Cash and cash equivalents, excluding restricted cash and cash equivalents and those that are to be exchanged or used to settle liabilities more than twelve months after the balance sheet date.

B. Liabilities that meet one of the following criteria are classified as current liabilities; otherwise they are classified as non-current liabilities:

- (a) Liabilities that are expected to be settled within the normal operating cycle;
- (b) Liabilities arising mainly from trading activities;
- (c) Liabilities that are to be settled within twelve months from the balance sheet date;
- (d) Liabilities for which the repayment date cannot be extended unconditionally to more than twelve months after the balance sheet date. 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.

## (6) Cash equivalents

Cash equivalents refer to short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

## (7) Accounts receivable

- A. Accounts and notes receivable entitle the Group a legal right to receive consideration in exchange for transferred goods or rendered services.
- B. The short-term accounts and notes receivable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(8) Impairment of financial assets

For financial assets at amortized cost, at each reporting date, the Group recognizes the impairment provision for 12 months expected credit losses if there has not been a significant increase in credit risk since initial recognition or recognizes the impairment provision for the lifetime expected credit losses (ECLs) if such credit risk has increased since initial recognition after taking into consideration all reasonable and verifiable information that includes forecasts. On the other hand, for accounts receivable that do not contain a significant financing component, the Group recognizes the impairment provision for lifetime ECLs.

(9) Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the first-in, first-out (FIFO) method. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production overheads (allocated based on normal operating capacity). It excludes borrowing costs. The item by item approach is used in applying the lower of cost and net realisable value. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale.

(10) Investments accounted for using equity method / associates

- A. Associates are all entities over which the Group has significant influence but not control. In general, it is presumed that the investor has significant influence, if an investor holds, directly or indirectly 20 percent or more of the voting power of the investee. Investments in associates are accounted for using the equity method and are initially recognized at cost.
- B. The Group's share of its associates' post-acquisition profits or losses is recognized in profit or loss, and its share of post-acquisition movements in other comprehensive income is recognized in other comprehensive income. When the Group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured receivables, the Group does not recognize further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the associate.
- C. When changes in an associate's equity do not arise from profit or loss or other comprehensive income of the associate and such changes do not affect the Group's ownership percentage of the associate, the Group recognizes the Group's share of change in equity of the associate in 'Capital surplus' in proportion to its ownership.
- D. Unrealized gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates have been adjusted where necessary to ensure consistency with the policies adopted by the Group.
- E. In the case that an associate issues new shares and the Group does not subscribe or acquire new shares proportionately, which results in a change in the Group's ownership percentage of the



associate but maintains significant influence on the associate, then ‘capital surplus’ and ‘investments accounted for under the equity method’ shall be adjusted for the increase or decrease of its share of equity interest. If the above condition causes a decrease in the Group’s ownership percentage of the associate, in addition to the above adjustment, the amounts previously recognized in other comprehensive income in relation to the associate are reclassified to profit or loss proportionately on the same basis as would be required if the relevant assets or liabilities were disposed of.

- F. The Group accounts for its interest in a joint venture using equity method. Unrealized profits and losses arising from the transactions between the Group and its joint venture are eliminated to the extent of the Group’s interest in the joint venture. However, when the transaction provides evidence of a reduction in the net realizable value of current assets or an impairment loss, all such losses shall be recognized immediately. When the Group’s share of losses in a joint venture equals or exceeds its interest in the joint venture together with any other unsecured receivables, the Group does not recognize further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the joint venture.

(11) Property, plant and equipment

- A. Property, plant and equipment are initially recorded at cost. Borrowing costs incurred during the construction period are capitalized.
- B. Subsequent costs are included in the asset’s carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.
- C. Land is not depreciated. Other property, plant and equipment apply cost model and are depreciated using the straight-line method to allocate their cost over their estimated useful lives. Each part of an item of property, plant, and equipment with a cost that is significant in relation to the total cost of the item must be depreciated separately.
- D. The assets’ residual values, useful lives and depreciation methods are reviewed, and adjusted if appropriate, at each financial year-end. If expectations for the assets’ residual values and useful lives differ from previous estimates or the patterns of consumption of the assets’ future economic benefits embodied in the assets have changed significantly, any change is accounted for as a change in estimate under IAS 8, ‘Accounting Policies, Changes in Accounting Estimates and Errors’, from the date of the change. The estimated useful lives of property, plant and equipment are as follows:

Buildings and structures	35 years
Machinery and equipment	6 ~ 7 years
Computer and communication equipment	5 years
Research equipment	5 ~ 7 years

Office equipment	5 ~ 10 years
Leasehold assets	2 ~ 15 years

(12) Leasing arrangements (lessee) – right-of-use assets/ lease liabilities

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

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

Lease payments are comprised of the fixed payments, less any lease incentives receivable.

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

C. At the commencement date, the right-of-use asset is stated at cost comprising the following:

(a) The amount of the initial measurement of lease liability; and

(b) Any lease payments made at or before the commencement date;

The right-of-use asset is measured subsequently using the cost model and is depreciated from the commencement date to the earlier of the end of the asset's useful life or the end of the lease term.

When the lease liability is remeasured, the amount of remeasurement is recognized as an adjustment to the right-of-use asset.

(13) Intangible assets

A. Computer software

Computer software is stated at cost and amortized on a straight-line basis over its estimated useful life of 1 to 5 years.

B. Goodwill

Goodwill arises in a business combination accounted for by applying the acquisition method.

(14) Impairment of non-financial assets

A. The Group assesses at each balance sheet date the recoverable amounts of those assets where there is an indication that they are impaired. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell or value in use. Except for goodwill, when the circumstances or reasons for recognizing impairment loss for an asset in prior years no longer exist or diminish, the impairment loss is reversed. The increased carrying amount due to reversal should not be more than what the depreciated or amortized historical cost would have been if the impairment had not been recognized.

B. The recoverable amounts of goodwill and intangible assets that have not yet been available for

use are evaluated periodically. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. Impairment loss of goodwill previously recognized in profit or loss shall not be reversed in the following years.

- C. For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the cash-generating units, or groups of cash-generating units, that is/are expected to benefit from the synergies of the business combination. Each unit or group of units to which the goodwill is allocated represents the lowest level within the entity at which the goodwill is monitored for internal management purposes. Goodwill is monitored at the operating segment level.

(15) Borrowings

Borrowings are recognized initially at fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortized cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognized in profit or loss over the period of the borrowings using the effective interest method.

(16) Accounts payable

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

(17) Derecognition of financial liabilities

A financial liability is derecognized when the obligation specified in the contract is either discharged or cancelled or expires.

(18) Employee benefits

A. Short-term employee benefits

Short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in respect of service rendered by employees in a period and should be recognized as expense in that period when the employees render service.

B. Pensions

Defined contribution plans

For defined contribution plans, the contributions are recognized as pension expense when they are due on an accrual basis. Prepaid contributions are recognized as an asset to the extent of a cash refund or a reduction in the future payments.

C. Termination benefits

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

D. Employees' compensation and directors' remuneration

Employees' compensation and directors' remuneration are recognized as expense and liability, provided that such recognition is required under legal or constructive obligation and those amounts can be reliably estimated. Any difference between the resolved amounts and the subsequently actual distributed amounts is accounted for as changes in estimates. If employee compensation is paid by shares, the Group calculates the number of shares based on the closing price at the previous day of the board meeting resolution.

(19) Employee share-based payment

A. For the equity-settled share-based payment arrangements, the employee services received are measured at the fair value of the equity instruments granted at the grant date, and are recognized as compensation cost over the vesting period, with a corresponding adjustment to equity. The fair value of the equity instruments granted shall reflect the impact of market vesting conditions and non-vesting conditions. Compensation cost is subject to adjustment based on the service conditions that are expected to be satisfied and the estimates of the number of equity instruments that are expected to vest under the non-market vesting conditions at each balance sheet date. Ultimately, the amount of compensation cost recognized is based on the number of equity instruments that eventually vest.

B. Restricted stocks:

- (a) Restricted stocks issued to employees are measured at the fair value of the equity instruments granted at the grant date, and are recognized as compensation cost over the vesting period.
- (b) For restricted stocks where those stocks do not restrict distribution of dividends to employees and employees are not required to return the dividends received if they resign during the vesting period, the Group recognizes the fair value of the dividends received by the employees who are expected to resign during the vesting period as compensation cost at the date of dividends declared.

(20) Income tax

A. The tax expense for the period comprises current and deferred tax. Tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or items recognized directly in equity, in which cases the tax is recognized in other comprehensive income or equity.

- B. The current income tax expense is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Company and its subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in accordance with applicable tax regulations. It establishes provisions where appropriate based on the amounts expected to be paid to the tax authorities. An additional tax is levied on the unappropriated retained earnings and is recorded as income tax expense in the year the stockholders resolve to retain the earnings.
- C. Deferred tax is recognized, using the balance sheet liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated balance sheet. However, the deferred tax is not accounted for if it arises from initial recognition of goodwill or of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred tax is provided on temporary differences arising on investments in subsidiaries, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the related deferred tax asset is realized or the deferred tax liability is settled.
- D. Deferred tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilized. At each balance sheet date, unrecognized and recognized deferred tax assets are reassessed.
- E. Current income tax assets and liabilities are offset and the net amount reported in the balance sheet when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or realize the asset and settle the liability simultaneously. Deferred tax assets and liabilities are offset on the balance sheet when the entity has the legally enforceable right to offset current tax assets against current tax liabilities and they are levied by the same taxation authority on either the same entity or different entities that intend to settle on a net basis or realise the asset and settle the liability simultaneously.

(21) Share capital

- A. Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or stock options are shown in equity as a deduction, net of tax, from the proceeds.
- B. Where the Company repurchases the Company's equity share capital that has been issued, the consideration paid, including any directly attributable incremental costs (net of income taxes) is deducted from equity attributable to the Company's equity holders. Where such shares are subsequently reissued, the difference between their book value and any consideration received, net of any directly attributable incremental transaction costs and the related income tax effects, is included in equity attributable to the Company's equity holders.

(22) Revenue recognition

A. Sales of goods

- (a) The Group engages in the manufacturing and selling of compound semiconductor wafer and advanced optoelectronics technology products. Sales are recognized when control of the products has been transferred, being when the products are delivered to the wholesaler, the wholesaler has full discretion over the channel and price to sell the products, and there is no unfulfilled obligation that could affect the wholesaler's acceptance of the products. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the wholesaler, and either the wholesaler has accepted the products in accordance with the sales contract, or the Group has objective evidence that all criteria for acceptance have been satisfied.
- (b) Revenue from these sales is recognized based on the price specified in the contract. A refund liability is recognized for expected sales discounts and allowances payable to customers in relation to sales made until the end of the reporting period.
- (c) A receivable is recognized when the goods are delivered as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due.

B. Royalty revenue

Some contracts require sales-based royalty in exchange for a license of intellectual property. The Group recognizes revenue when the performance obligation has been satisfied and the subsequent sale occurs.

C. Financing components

The Group does not expect to have any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year. As a consequence, the Group does not adjust any of the transaction prices for the time value of money.

(23) Government grants

Government grants are recognized at their fair value only when there is reasonable assurance that the Group will comply with any conditions attached to the grants and the grants will be received. Government grants are recognized in profit or loss on a systematic basis over the periods in which the Group recognizes expenses for the related costs for which the grants are intended to compensate.

(24) Operating segments

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The Group's chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Board of Directors that makes strategic decisions.

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

The preparation of these consolidated financial statements requires management to make critical judgements in applying the Group's accounting policies and make critical assumptions and estimates concerning future events. Assumptions and estimates may differ from the actual results and are continually evaluated and adjusted based on historical experience and other factors. Such assumptions and estimates have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year; and the related information is addressed below:

### (1) Critical judgements in applying the Group's accounting policies

None.

### (2) Critical accounting estimates and assumptions

The Group make estimates and assumptions based on expectation of future events that are believed to be reasonable under the circumstances at the end of the reporting period. The resulting accounting estimates might be different from the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below:

#### Evaluation of inventories

As inventories are stated at the lower of cost and net realizable value, the Group must determine the net realizable value of inventories on balance sheet date using judgements and estimates. Due to the rapid technology innovation, the Group evaluates the amounts of normal inventory consumption, obsolete inventories or inventories without market selling value on balance sheet date, and writes down the cost of inventories to the net realizable value. Such an evaluation of inventories is principally based on the demand for the products within the specified period in the future. Therefore, there might be material changes to the evaluation.

As of December 31, 2022, the carrying amount of inventories was \$338,168.

## 6. DETAILS OF SIGNIFICANT ACCOUNTS

### (1) Cash and cash equivalents

	<u>December 31, 2022</u>	<u>December 31, 2021</u>
Cash on hand	\$ 114	\$ 110
Checking accounts and demand deposits	413,762	1,829,855
Time deposits	<u>28,320</u>	<u>9,800</u>
	<u>\$ 442,196</u>	<u>\$ 1,839,765</u>

A. The Group transacts with a variety of financial institutions with high credit quality to disperse credit risk and expects that the probability of counterparty default is remote.

B. The Group has no cash and cash equivalents pledged to others.

(2) Accounts receivable

	December 31, 2022	December 31, 2021
Accounts receivable	\$ 228,635	\$ 157,030
Accounts receivable-related party	2,958	2,913
Less: Loss allowance	( 29,119)	( 1,157)
	<u>\$ 202,474</u>	<u>\$ 158,786</u>

- A. As of December 31, 2022 and 2021, accounts receivable were all from contracts with customers. And as of January 1, 2021, the balance of receivables from contracts with customers was \$197,537.
- B. Information relating to credit risk of accounts receivable is provided in Note 12(2).

(3) Inventories

	December 31, 2022		
	Cost	Allowance	Book value
Raw materials	\$ 141,531	(\$ 21,590)	\$ 119,941
Work in progress	246,890	( 54,654)	192,236
Finished goods	40,127	( 14,136)	25,991
	<u>\$ 428,548</u>	<u>(\$ 90,380)</u>	<u>\$ 338,168</u>

	December 31, 2021		
	Cost	Allowance	Book value
Raw materials	\$ 130,328	(\$ 24,507)	\$ 105,821
Work in progress	196,161	( 55,012)	141,149
Finished goods	46,441	( 12,960)	33,481
	<u>\$ 372,930</u>	<u>(\$ 92,479)</u>	<u>\$ 280,451</u>

Expenses and costs incurred as cost of operating revenue for the years ended December 31, 2022 and 2021 were as follows:

	Years ended December 31,	
	2022	2021
Cost of goods sold	\$ 1,061,316	\$ 900,980
Gain on recovery of (Loss) on market price decline	( 6,599)	34,933
Revenue from sale of scraps	( 35,836)	( 45,089)
	<u>\$ 1,018,881</u>	<u>\$ 890,824</u>

The Group recognized gain on recovery of market price decline for the year ended December 31, 2022 because some of the inventories previously written down were sold.



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

<u>Items</u>	<u>December 31, 2022</u>
Non-current items:	
Equity instruments	
Unlisted, OTC, Emerging stocks	\$ 1,397
Valuation adjustment	-
	<u>\$ 1,397</u>

December 31, 2021: None.

- A. The Group has elected to classify investments that are considered to be strategic investments as financial assets at fair value through other comprehensive income. The fair value of such investments amounted to \$1,397 as of December 31, 2022.
- B. Information relating to credit risk of financial assets at fair value through other comprehensive income is provided in Note 12(2).

(5) Investments accounted for using the equity method

- A. The Group's movements and details of investments accounted for using the equity method are as follows:

	<u>2022</u>	<u>2021</u>
At January 1	\$ 1,690,553	\$ 1,013,963
Addition of investments accounted for using the equity method	1,586,227	540,680
Share of net loss of investments accounted for using the equity method	( 733,699)	( 461,136)
Changes in capital surplus	( 137,081)	613,479
Changes in retained earnings	663	( 1,285)
(Loss) gain on disposal of investments transferred from other comprehensive income due to not recognized by shareholding percentage	( 4,171)	29,526
Unrealized gains (Note)	-	( 10,400)
Net exchange difference	44,122	( 34,274)
At December 31	<u>\$ 2,446,614</u>	<u>\$ 1,690,553</u>

Note: Please refer to Note 7(2) for the information of unrealized gain on disposal of property, plant and equipment.

	<u>December 31, 2022</u>	<u>December 31, 2021</u>
Associate:		
Unikorn Semiconductor Corporation ("Unikorn")	\$ 662,368	\$ 213,872
Joint ventures:		
Changzhou Chemsemi Co., Ltd. ("Chemsemi")	1,663,486	1,357,673
Shanghai Galasemi Co., Ltd. ("Shanghai Galasemi")	120,760	119,008
	<u>\$ 2,446,614</u>	<u>\$ 1,690,553</u>

B. The basic information of the associate and joint ventures that is material to the Group is as follows:

Company name	Principal place of business	Shareholding ratio		Nature of relationship	Methods of measurement
		December 31, 2022	December 31, 2021		
Unikorn	Taiwan	42.06%	45.39%	Associate	Equity method
Chemsemi	China	24.21%	19.65%	Joint venture	Equity method
Shanghai Galasemi	China	48.00%	48.00%	Joint venture	Equity method

C. The summarized financial information of the associate and joint ventures that is material to the Group is as follows:

Balance sheet

	<u>Unikorn</u>	
	<u>December 31, 2022</u>	<u>December 31, 2021</u>
Current assets	\$ 1,581,958	\$ 378,828
Non-current assets	1,320,778	1,278,829
Current liabilities	( 1,283,976)	( 1,203,001)
Non-current liabilities	( 506,162)	( 373,708)
Total net assets	<u>\$ 1,112,598</u>	<u>\$ 80,948</u>

	<u>Chemsemi</u>	
	<u>December 31, 2022</u>	<u>December 31, 2021</u>
Current assets	\$ 3,107,926	\$ 4,996,856
Non-current assets	6,837,171	3,070,981
Current liabilities	( 1,076,537)	( 504,214)
Non-current liabilities	( 1,997,491)	( 654,347)
Total net assets	<u>\$ 6,871,069</u>	<u>\$ 6,909,276</u>

	Shanghai Galasemi	
	December 31, 2022	December 31, 2021
Current assets	\$ 219,531	\$ 165,650
Non-current assets	165,534	90,579
Current liabilities	( 49,647)	( 12,996)
Non-current liabilities	( 61,773)	-
Total net assets	<u>\$ 273,645</u>	<u>\$ 243,233</u>

Statement of comprehensive income

	Unikorn	
	Years ended December, 31	
	2022	2021
Net loss	(\$ 976,415)	(\$ 800,249)
Total comprehensive loss	<u>(\$ 976,270)</u>	<u>(\$ 803,054)</u>

	Chemsemi	
	Years ended December, 31	
	2022	2021
Net loss/ total comprehensive loss	(\$ 1,151,847)	(\$ 429,137)

	Shanghai Galasemi	
	Year ended December 31, 2022	April 12, 2021 (acquisition date) to December 31, 2021
Net loss/ total comprehensive loss	(\$ 1,235)	(\$ 25,291)

D. In August 2021, the Group participated in Unikorn's increase of common stocks for cash amounting to \$400,000 thousand (USD 14,599 thousand). Through the completion of participation in Unikorn's issuance of common stocks, the Group holds 45.39% of Unikorn's common stocks issued.

In March and December 2022, the Group participated in Unikorn's increase of common stocks for cash amounting to \$600,000 thousand (USD 21,375 thousand) and \$100,000 thousand (USD 3,256 thousand), respectively. Through the completion of participation in Unikorn's issuance of common stocks, the Group holds 42.06% of Unikorn's common stocks issued.

E. In 2021, the Group did not participate in Chemsemi's 2021 increase of common stocks for cash, which made the Group's shareholding ratio of Chemsemi's common stocks changed from 32.80% to 19.65%.

In February and October 2022, the Group participated in Chemsemi's increase of common stocks for cash amounting to USD 15,837 thousand (\$443,899 thousand) and USD 7,885 thousand (\$251,191 thousand). In addition, the Group acquired the equity of Chemsemi from other shareholder at RMB 43,356 thousand (\$191,137 thousand) in November 2022, and provided part

of the shares of Chemsemi held by the Group to other shareholders as guarantee for the payment of the transfer of Chemsemi equity. As of December 31, 2022, the Group has not yet paid the transfer of equity of \$191,137 (recognized as “Other payables”).

- F. The Group invested USD 3,000 thousand (\$84,635 thousand) in Shanghai Galasemi in April 2021. The joint venture is mainly engaged in the design and sales of electronic components for the optical communication market. In addition, in November 2021, the Group participated in Shanghai Galasemi’s increase of common stocks for cash amounting to USD 2,016 thousand (\$56,045 thousand). Through the completion of participation in Shanghai Galasemi’s issuance of common stocks, the Group retained the shareholding ratio in Shanghai Galasemi’s common stocks issued at 48%, and the total investment amount was USD 5,016 thousand (\$140,680 thousand).
- G. Information about the investment accounted for using the equity method that were pledged to others as collateral is provided in Note 8.

(6) Property, plant and equipment

	Land	Buildings	Machinery equipment	Computer and communication equipment	Research equipment	Office equipment	Leasehold improvements	Construction in progress and equipment to be inspected	Total
At January 1, 2022									
Cost	\$ 127,466	\$ 84,978	\$ 1,212,720	\$ 9,304	\$ 99,828	\$ 9,459	\$ 269,208	\$ 36,343	\$ 1,849,306
Accumulated depreciation and impairment	-	( 15,579)	( 937,287)	( 8,014)	( 67,768)	( 8,987)	( 236,186)	-	( 1,273,821)
	<u>\$ 127,466</u>	<u>\$ 69,399</u>	<u>\$ 275,433</u>	<u>\$ 1,290</u>	<u>\$ 32,060</u>	<u>\$ 472</u>	<u>\$ 33,022</u>	<u>\$ 36,343</u>	<u>\$ 575,485</u>
<u>2022</u>									
Opening net book amount	\$ 127,466	\$ 69,399	\$ 275,433	\$ 1,290	\$ 32,060	\$ 472	\$ 33,022	\$ 36,343	\$ 575,485
Additions	-	-	25,568	-	55,893	-	13,103	110,458	205,022
Transfers	-	-	38,418	-	-	-	-	( 38,418)	-
Disposals	-	-	( 5,282)	-	( 647)	-	-	( 26,450)	( 32,379)
Depreciation charges	-	( 2,614)	( 88,373)	( 473)	( 16,493)	( 213)	( 8,736)	-	( 116,902)
Net exchange differences	13,954	7,517	29,105	126	4,577	44	3,747	5,371	64,441
Closing net book amount	<u>\$ 141,420</u>	<u>\$ 74,302</u>	<u>\$ 274,869</u>	<u>\$ 943</u>	<u>\$ 75,390</u>	<u>\$ 303</u>	<u>\$ 41,136</u>	<u>\$ 87,304</u>	<u>\$ 695,667</u>
At December 31, 2022									
Cost	\$ 141,420	\$ 94,280	\$ 1,346,758	\$ 9,283	\$ 160,802	\$ 9,552	\$ 306,573	\$ 87,304	\$ 2,155,972
Accumulated depreciation and impairment	-	( 19,978)	( 1,071,889)	( 8,340)	( 85,412)	( 9,249)	( 265,437)	-	( 1,460,305)
	<u>\$ 141,420</u>	<u>\$ 74,302</u>	<u>\$ 274,869</u>	<u>\$ 943</u>	<u>\$ 75,390</u>	<u>\$ 303</u>	<u>\$ 41,136</u>	<u>\$ 87,304</u>	<u>\$ 695,667</u>

	Land	Buildings	Machinery equipment	Computer and communication equipment	Research equipment	Office equipment	Leasehold improvements	Construction in progress and equipment to be inspected	Total
At January 1, 2021									
Cost	\$ 131,150	\$ 87,434	\$ 1,322,122	\$ 10,379	\$ 98,128	\$ 9,700	\$ 276,828	\$ 6,672	\$ 1,942,413
Accumulated depreciation and impairment	-	( 13,531)	( 920,689)	( 9,196)	( 58,766)	( 8,960)	( 235,637)	-	( 1,246,779)
	<u>\$ 131,150</u>	<u>\$ 73,903</u>	<u>\$ 401,433</u>	<u>\$ 1,183</u>	<u>\$ 39,362</u>	<u>\$ 740</u>	<u>\$ 41,191</u>	<u>\$ 6,672</u>	<u>\$ 695,634</u>
2021									
Opening net book amount	\$ 131,150	\$ 73,903	\$ 401,433	\$ 1,183	\$ 39,362	\$ 740	\$ 41,191	\$ 6,672	\$ 695,634
Additions	-	-	54,591	1,484	5,775	80	-	36,308	98,238
Transfers	-	-	3,913	279	-	-	-	( 5,895)	( 1,703)
Disposals	-	-	( 89,598)	( 16)	-	-	-	-	( 89,614)
Effects due to changes in consolidated entities	-	-	-	( 975)	( 244)	( 76)	-	( 198)	( 1,493)
Depreciation charges	-	( 2,457)	( 84,328)	( 631)	( 11,872)	( 255)	( 7,096)	-	( 106,639)
Impairment loss	-	-	( 1,070)	-	-	-	-	-	( 1,070)
Net exchange differences	( 3,684)	( 2,047)	( 9,508)	( 34)	( 961)	( 17)	( 1,073)	( 544)	( 17,868)
Closing net book amount	<u>\$ 127,466</u>	<u>\$ 69,399</u>	<u>\$ 275,433</u>	<u>\$ 1,290</u>	<u>\$ 32,060</u>	<u>\$ 472</u>	<u>\$ 33,022</u>	<u>\$ 36,343</u>	<u>\$ 575,485</u>
At December 31, 2021									
Cost	\$ 127,466	\$ 84,978	\$ 1,212,720	\$ 9,304	\$ 99,828	\$ 9,459	\$ 269,208	\$ 36,343	\$ 1,849,306
Accumulated depreciation and impairment	-	( 15,579)	( 937,287)	( 8,014)	( 67,768)	( 8,987)	( 236,186)	-	( 1,273,821)
	<u>\$ 127,466</u>	<u>\$ 69,399</u>	<u>\$ 275,433</u>	<u>\$ 1,290</u>	<u>\$ 32,060</u>	<u>\$ 472</u>	<u>\$ 33,022</u>	<u>\$ 36,343</u>	<u>\$ 575,485</u>

A. Amount of borrowing costs capitalized as part of property, plant and equipment for the years ended December 31, 2022 and 2021:

None.

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

(7) Leasing arrangements – lessee

A. The Group leases various assets including plant and office premises. Lease agreements are typically made for periods of 1 to 4 years. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose covenants. Short-term leases with a lease term of 12 months or less comprise of office premises and parking spaces. Low-value assets comprise of office equipment.

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

	<u>December 31, 2022</u>	<u>December 31, 2021</u>
	<u>Carrying amount</u>	<u>Carrying amount</u>
Buildings	<u>\$ 24,448</u>	<u>\$ 3,641</u>

	<u>Years ended December 31,</u>	
	<u>2022</u>	<u>2021</u>
	<u>Depreciation charge</u>	<u>Depreciation charge</u>
Buildings	<u>\$ 7,626</u>	<u>\$ 5,526</u>

C. For the years ended December 31, 2022 and 2021, the additions to right-of-use assets were \$27,430 and \$0, respectively.

D. The information on income and expense accounts relating to lease agreements is as follows:

	<u>Years ended December 31,</u>	
	<u>2022</u>	<u>2021</u>
<u>Items affecting profit or loss</u>		
Interest expense on lease liabilities	\$ 450	\$ 436
Expense on short-term lease agreements	1,785	2,509
Expense on leases of low-value assets	49	35

E. For the years ended December 31, 2022 and 2021, the Group's total cash outflow for leases amounted to \$9,846 and \$8,925, respectively.

(8) Intangible assets

	<u>Computer Software</u>	<u>Goodwill</u>	<u>Total</u>
<u>At January 1, 2022</u>			
Cost	\$ 66,520	\$ 160,824	\$ 227,344
Accumulated amortization and impairment	( 53,842)	( 79,136)	( 132,978)
	<u>\$ 12,678</u>	<u>\$ 81,688</u>	<u>\$ 94,366</u>
<u>2022</u>			
At January 1	\$ 12,678	\$ 81,688	\$ 94,366
Addition	2,100	-	2,100
Amortization charges	( 6,878)	-	( 6,878)
Impairment	-	( 41,816)	( 41,816)
Net exchange differences	1,241	7,665	8,906
At December 31	<u>\$ 9,141</u>	<u>\$ 47,537</u>	<u>\$ 56,678</u>
<u>At December 31, 2022</u>			
Cost	\$ 74,953	\$ 178,428	\$ 253,381
Accumulated amortization and impairment	( 65,812)	( 130,891)	( 196,703)
	<u>\$ 9,141</u>	<u>\$ 47,537</u>	<u>\$ 56,678</u>
	<u>Computer Software</u>	<u>Goodwill</u>	<u>Total</u>
<u>At January 1, 2021</u>			
Cost	\$ 76,575	\$ 165,472	\$ 242,047
Accumulated amortization and impairment	( 58,750)	( 38,642)	( 97,392)
	<u>\$ 17,825</u>	<u>\$ 126,830</u>	<u>\$ 144,655</u>
<u>2021</u>			
At January 1	\$ 17,825	\$ 126,830	\$ 144,655
Transferred from construction in progress and equipment pending acceptance	1,703	-	1,703
Addition	329	-	329
Effect due to changes in consolidated entities	( 232)	-	( 232)
Amortization charges	( 6,471)	-	( 6,471)
Impairment loss	-	( 42,074)	( 42,074)
Net exchange differences	( 476)	( 3,068)	( 3,544)
At December 31	<u>\$ 12,678</u>	<u>\$ 81,688</u>	<u>\$ 94,366</u>
<u>At December 31, 2021</u>			
Cost	\$ 66,520	\$ 160,824	\$ 227,344
Accumulated amortization and impairment	( 53,842)	( 79,136)	( 132,978)
	<u>\$ 12,678</u>	<u>\$ 81,688</u>	<u>\$ 94,366</u>



A. Details of amortization on intangible assets are as follows:

	Years ended December 31,	
	2022	2021
Cost of operating revenue	\$ 6,878	\$ 6,457
General and administrative expenses	-	14
	<u>\$ 6,878</u>	<u>\$ 6,471</u>

B. Please refer to Note 6(9) for the information about the goodwill impairment assessment.

(9) Impairment of non-financial assets

A. The Group recognized impairment loss for the years ended December 31, 2022 and 2021 amounted to \$41,816 and \$43,144, respectively.

Details of such loss are as follows:

	Years ended December 31,	
	2022	2021
	Recognized in profit or loss	Recognized in profit or loss
Impairment loss – machinery	\$ -	\$ 1,070
Impairment loss – gooddwill	41,816	42,074
	<u>\$ 41,816</u>	<u>\$ 43,144</u>

B. The Group carried out the impairment assessment of goodwill on the balance sheet date. The recoverable amount of the cash-generation units is determined based on the value-in-use calculated using cash flow projections discounted from financial budgets approved by management covering a five-year-period. The discount rate used by management are 6.18% and 12.01%, respectively. The calculation of value-in-use for the cash-until is mainly based on the future growth rate of operating revenues, historical information on gross margins and operating expenses rations, and the future trend of industrial economy.

For the years ended December 31, 2022 and 2021, based on the Group's assessment, the impairment losses of \$41,816 and \$42,074 were recognized, respectively, for the goodwill due to the recoverable amount being less than the carrying amount.

(10) Non-current assets

Item	December 31, 2022	December 31, 2021
Prepayments for equipment	\$ 67,556	\$ 41,431
Refundable deposits (Note 1)	2,382	2,172
Time deposits (Note 2)	300	300
	<u>\$ 70,238</u>	<u>\$ 43,903</u>

Note 1: Please refer to Note 8 for the information of the contracts secured by refundable deposits.

Note 2: Please refer to Note 8 for the information of the Group's pledged assets.

(11) Short-term borrowings

Type of borrowings	December 31, 2022	December 31, 2021	Collateral
Bank borrowings			
Secured borrowings	\$ 20,000	\$ 20,000	Time deposit (Note)
Interest rate range	1.78%	1.53%	

Note: Please refer to Note 8 for the information of the Group's assets pledged to secured borrowings.

(12) Other payables

	December 31, 2022	December 31, 2021
Payable for investment(Note)	\$ 191,137	\$ -
Accrued salaries and bonuses	46,092	41,568
Accrued unused compensated absences	29,839	22,270
Payables for equipment	5,775	6,901
Accrued utilities	2,944	4,755
Accrued maintenance expenses	1,982	2,689
Accrued outsourcing manufacturing services charges	1,886	1,137
Accrued professional service fees	412	2,850
Other accrued expenses	20,954	14,593
	<u>\$ 301,021</u>	<u>\$ 96,763</u>

Note : Please refer to Note 6(5) for information on payables for investment.

(13) Long-term borrowings

Type of borrowings	Borrowing period and repayment term	Interest rate	Collateral	December 31, 2022	December 31, 2021
Subsidiary- Global Communication Semiconductor, LLC					
Secured borrowings (Note 1)	(Note 2)	3.50%	Land and buildings (Note 4)	\$ 209,338	\$ 193,755
Non-secured borrowings (Note 1)	(Note 3)	4.00%	-	163,049	-
Subsidiary- D-Tech Optoelectronics, Inc.					
Non-secured borrowings	(Note 5)	1.00%	-	-	5,210
				<u>372,387</u>	<u>198,965</u>
Less: Current portion				( <u>43,277</u> )	( <u>10,292</u> )
				<u>\$ 329,110</u>	<u>\$ 188,673</u>

Note 1: According to the secured loan contract, the Group was required to comply with certain financial covenants by maintaining certain financial ratios, such as debt coverage ratio, on an annual basis. As of December 31, 2022 and 2021, the Group had not violated any of the required financial covenants.

Note 2: Borrowing period is from August 6, 2015 to August 6, 2022; interest and principal are repayable monthly. On July 12, 2021, the Company's subsidiary, Global Communication Semiconductor, LLC made amendments to the aforementioned long-term loan contract with the bank. The main amendments are that the borrowing amount is adjusted to USD 7,100 thousand with the maturity date on August 6, 2031, and the borrowing rate is adjusted to 3.50%.

Note 3: From April 22, 2022 to December 31, 2026, with monthly interest and principal repayments.

Note 4: Please refer to Note 8 for the information of the Group's assets pledged for secured borrowings.

Note 5: It refers to Second Draw PPP applied from banks with the loan period from February 2, 2021 to February 2, 2026. The PPP loan must be used for operating expenses, such as salary, rent and other expenses as specified in the loan agreement in order to apply for loan forgiveness within 10 months after the covered period. The Company's subsidiary, D-Tech Optoelectronics, Inc. had received the approval of the loan forgiveness from SBA on April 27, 2022 and \$5,408 was recognized as income from PPP (recognized as "Other income") in the 2022 Consolidated Financial Statements.

Note 6: It refers to Paycheck Protection Program ("PPP") applied from banks with the loan period from April 2020 to April 2022. The PPP loan must be used for operating expenses, such as salary, rent and other expenses as specified in the loan agreement in order to apply for loan forgiveness. The Company's subsidiary, Global Communication Semiconductor, LLC and D-Tech Optoelectronics, Inc. had received the approval of the loan forgiveness from SBA on June 9, 2021 and January 6, 2021, respectively. And \$87,633 was recognized as income from PPP (recognized as "Other income") in the 2021 Consolidated Financial Statements.

(14) Pension plan

- A. The Group's US subsidiary has established a 401(K) pension plan (the "Plan") covering substantially all employees. The Plan provides voluntary salary reduction contributions by eligible participants in accordance with Section 401(K) of the Internal Revenue Code (IRC), as well as discretionary matching contributions below 15% of employees' salaries from the Company's subsidiary to its employees' individual pension accounts.
- B. The Group's Taiwan subsidiaries have established a defined contribution pension plan (the "New Plan") under the Labor Pension Act (the "Act"), covering all regular employees with R.O.C. nationality. Under the New Plan, the Company's Taiwan subsidiaries contribute monthly an amount based on 6% of the employees' monthly salaries and wages to the employees' individual pension accounts at the Bureau of Labor Insurance. The benefits accrued are paid monthly or in lump sum upon termination of employment.

C. The pension costs under the above pension plans of the Group for the years ended December 31, 2022 and 2021 amounted to \$17,100 and \$16,164, respectively.

(15) Share-based payment-employee compensation plan

A. Through December 31, 2022 and 2021, the Group's share-based payment transactions are set forth below:

Type of arrangement	Grant date	Quantity granted	Contract period	Vesting condition
Employee stock options	April 2013	1,538,000 shares	10 years	(Note 1)
Employee stock options	October 2013	538,000 shares	10 years	(Note 1)
Employee stock options	November 2014	75,000 shares	10 years	(Note 1)
Employee stock options	February 2015	652,200 shares	10 years	(Note 1)
Employee stock options	March 2016	5,000 shares	10 years	(Note 1)
Employee stock options	August 2016	895,000 shares	10 years	(Note 1)
Employee stock options	November 2016	34,000 shares	10 years	(Note 1)
Employee stock options	February 2017	15,000 shares	10 years	(Note 1)
Employee stock options	August 2017	215,000 shares	10 years	(Note 1)
Employee stock options	January 2018	13,000 shares	10 years	(Note 1)
Employee stock options	February 2018	355,000 shares	10 years	(Note 1)
Employee stock options	August 2018	27,000 shares	10 years	(Note 1)
Employee stock options	November 2018	5,000 shares	10 years	(Note 1)
Employee stock options	March 2019	578,000 shares	10 years	(Note 1)
Employee stock options	August 2019	40,000 shares	10 years	(Note 1)
Employee stock options	March 2020	250,000 shares	10 years	(Note 1)
Employee stock options	August 2020	3,000 shares	10 years	(Note 1)
Employee stock options	November 2020	6,000 shares	10 years	(Note 1)
Employee stock options	March 2021	820,000 shares	10 years	(Note 1)
Employee stock options	April 2021	20,000 shares	10 years	(Note 1)
Employee stock options	February 2022	454,000 shares	10 years	(Note 1)
Employee stock options	August 2022	23,000 shares	10 years	(Note 1)
Employee stock options	November 2022	36,000 shares	10 years	(Note 1)
Restricted stocks to employees (Note 3)	March 2020	518,000 shares	2 years	(Note 2)
Restricted stocks to employees (Note 3)	March 2021	427,000 shares	2 years	(Note 2)
Restricted stocks to employees (Note 3)	February 2022	445,000 shares	2 years	(Note 2)

Note 1: Some employee stock options shall be vested and become exercisable up to 50% of the shares after fulfilling two years of service, and in accordance with the agreement, the remaining 50% of such options will be vested ratably in equal installments as of the last day of each of the succeeding 24 months.

Note 2: Some restricted stocks to employees shall be vested up to 50% of the shares after one year of service, and the remaining 50% of such shares to be vested after fulfilling two years of service.

Note 3: The restricted stocks to employees are restricted from transferring within vesting period, but are allowed for voting rights and rights to receive dividends. The Company will recover restricted stocks at no consideration and cancel registration if employees resign or die not due to occupational hazards. However, employees do not need to return dividends already received.

B. Details of the employee stock options are set forth below:

	Year ended December 31, 2022		
	No. of options	Currency	Weighted average exercise price (in dollars)
Options outstanding at beginning of the year	3,163,120	NTD	\$ 55.68
Options granted	513,000	NTD	44.87
Options exercised	( 50,000)	NTD	31.20
Options forfeited	( 172,000)	NTD	51.89
Options outstanding at end of the year	<u>3,454,120</u>	NTD	53.52
Options exercisable at end of the year	<u>2,211,016</u>	NTD	57.07
	Year ended December 31, 2021		
	No. of options	Currency	Weighted average exercise price (in dollars)
Options outstanding at beginning of the year	2,546,183	NTD	\$ 57.47
Options granted	840,000	NTD	49.82
Options exercised	( 35,313)	NTD	59.83
Options forfeited	( 187,750)	NTD	53.00
Options outstanding at end of the year	<u>3,163,120</u>	NTD	55.68
Options exercisable at end of the year	<u>2,006,203</u>	NTD	58.54

C. The weighted-average stock price of stock options at exercise dates for the years ended December 31, 2022 and 2021 was \$44.91 (in dollars) and \$49.46 (in dollars), respectively.

D. As of December 31, 2022 and 2021, the range of exercise prices of stock options outstanding are as follows:

Grant date	Expiry date	December 31, 2022		
		No. of Shares	Currency	Stock options exercise price (in dollars)
April 2013	April 2023	140,834	NTD	\$ 11.10
October 2013	October 2023	7,917	NTD	17.30
February 2015	February 2025	223,369	NTD	39.30
August 2016	August 2026	626,000	NTD	62.70
November 2016	November 2026	8,000	NTD	61.40
February 2017	February 2027	15,000	NTD	54.50
August 2017	August 2027	200,000	NTD	63.40
January 2018	January 2028	8,000	NTD	82.70
February 2018	February 2028	315,000	NTD	79.70
August 2018	August 2028	14,000	NTD	61.00
March 2019	March 2029	515,000	NTD	58.20
August 2019	August 2029	25,000	NTD	56.80
March 2020	March 2030	210,000	NTD	43.80
August 2020	August 2030	3,000	NTD	52.50
November 2020	November 2030	6,000	NTD	47.00
March 2021	March 2031	654,000	NTD	48.70
February 2022	February 2032	424,000	NTD	45.90
August 2022	August 2032	23,000	NTD	39.85
November 2022	November 2032	36,000	NTD	35.05
		<u>3,454,120</u>		

		December 31, 2021		
Grant date	Expiry date	No. of Shares	Currency	Stock options exercise price (in dollars)
April 2013	April 2023	140,834	NTD	\$ 11.10
October 2013	October 2023	7,917	NTD	17.30
November 2014	November 2024	50,000	NTD	31.90
February 2015	February 2025	223,369	NTD	40.20
March 2016	March 2026	5,000	NTD	69.20
August 2016	August 2026	646,000	NTD	64.10
November 2016	November 2026	26,000	NTD	62.70
February 2017	February 2027	15,000	NTD	55.70
August 2017	August 2027	200,000	NTD	64.80
January 2018	January 2028	8,000	NTD	84.50
February 2018	February 2028	315,000	NTD	81.40
August 2018	August 2028	14,000	NTD	62.30
March 2019	March 2029	518,000	NTD	59.50
August 2019	August 2029	25,000	NTD	58.00
March 2020	March 2030	210,000	NTD	44.80
August 2020	August 2030	3,000	NTD	53.60
November 2020	November 2030	6,000	NTD	48.00
March 2021	March 2031	750,000	NTD	49.80
		<u>3,163,120</u>		

E. Details of the restricted stocks to employees are set forth below:

Employee restricted stocks	Years ended December 31,	
	2022	2021
	No. of shares	No. of shares
Outstanding at beginning of the year	587,500	768,000
Granted (Notes 1 and 2)	445,000	427,000
Vested	( 375,000)	( 518,000)
Retired (cancelled)	( 67,500)	( 61,000)
Retired (uncancelled)	( 15,000)	( 28,500)
Outstanding at end of the year	<u>575,000</u>	<u>587,500</u>

Note 1: For the restricted stocks granted with the compensation cost accounted for using the fair value method, the fair values on the grant date are calculated based on the closing price on the grant date.

Note 2: The fair value of restricted stocks granted in February 2022 and March 2021 was \$45.90 (in dollars) and \$49.80 (in dollars), respectively.

F. For the stock options granted with the compensation cost accounted for using the fair value method, their fair value on the grant date is estimated using the Black-Scholes option-pricing model. The parameters used in the estimation of the fair value are as follows:

Type of arrangement	Grant date	Currency	Fair value (in dollars)	Exercise price (in dollars)	Expected price volatility	Expected option period (years)	Expected dividend yield rate	Risk-free interest rate	Weighted average fair value (in dollars)
Employee stock options	March 2021	NTD	\$ 50.18	\$ 49.80	13.98%	6.26	1.00%	0.45%	\$ 19.91
Employee stock options	April 2021	NTD	51.27	50.60	23.28%	6.26	1.00%	0.42%	21.84
Employee stock options	February 2022	NTD	46.41	45.90	17.87%	6.26	1.00%	0.95%	18.37
Employee stock options	August 2022	NTD	37.42	39.85	46.86%	6.26	1.00%	1.65%	18.99
Employee stock options	November 2022	NTD	37.80	35.05	24.25%	6.26	1.00%	1.28%	15.46

G. Expenses incurred on share-based payment transactions are shown below:

	Years ended December 31,	
	2022	2021
Equity-settled	\$ 29,877	\$ 28,473

(16) Common stock

A. As of December 31, 2022, the Company's paid-in capital was \$1,108,251, consisting of 110,825,067 shares with a par value of \$10 (in dollars) per share.

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

Unit: Numbers of shares

	2022	2021
Outstanding ordinary shares at January 1	110,397,567	90,024,754
Exercise of employee stock options	50,000	35,313
Issuance of share capital - private placement	-	20,000,000
Issuance of restricted stocks to employees	445,000	427,000
Retirement of restricted stocks to employees	( 67,500)	( 61,000)
Restricted stocks retrieved from employees and to be cancelled	( 15,000)	( 28,500)
Outstanding ordinary shares at December 31	110,810,067	110,397,567
Treasury stocks	-	250,000
Restricted stocks retrieved from employees and to be cancelled	15,000	28,500
Issued ordinary shares at December 31	110,825,067	110,676,067



- B. On May 15, 2018, the shareholders adopted a resolution to reserve 1,000,000 shares for the purpose of granting employee restricted stocks with par value of \$10 (in dollars) per shares, with the effective date filed with the regulator. The subscription price is \$0 (in dollar) per share. The employee restricted stocks issued are subject to certain transfer restrictions before their vesting conditions are met. Other than these restrictions, the rights and obligations of these shares issued are the same as other issued ordinary shares. On September 3, 2018 and March 15, 2019, the Board of Directors resolved to grant 28,000 and 570,000 employee restricted stocks, respectively. As of December 31, 2022, the Company had retrieved 23,000 employee restricted stocks in total due to the employees' resignation, and the retrieved shares have been retired.
- C. On June 5, 2019, the shareholders adopted a resolution to reserve 1,000,000 shares for the purpose of granting employee restricted stocks with par value of \$10 (in dollars) per shares, with the effective date filed with the regulator. The subscription price is \$0 (in dollar) per share. The employee restricted stocks issued are subject to certain transfer restrictions before their vesting conditions are met. Other than these restrictions, the rights and obligations of these shares issued are the same as other issued ordinary shares. On March 16, 2020, the Board of Directors resolved to grant 518,000 employee restricted stocks. As of December 31, 2022, the Company had retrieved 82,500 employee restricted stocks in total due to the employees' resignation, and the retrieved shares have been retired.
- D. On June 5, 2020, the shareholders adopted a resolution to reserve 1,000,000 shares for the purpose of granting employee restricted stocks with par value of \$10 (in dollars) per shares, with the effective date filed with the regulator. The subscription price is \$0 (in dollar) per share. The employee restricted stocks issued are subject to certain transfer restrictions before their vesting conditions are met. Other than these restrictions, the rights and obligations of these shares issued are the same as other issued ordinary shares. On March 19, 2021, the Board of Directors resolved to grant 427,000 employee restricted stocks. As of December 31, 2022, the Company had retrieved 76,000 employee restricted stocks in total due to the employees' resignation, and 71,000 stocks have been retired. Additionally, the remaining 5,000 retrieved stocks as of February 20, 2023, have not been retired.
- E. On July 2, 2021, the shareholders adopted a resolution to reserve 1,000,000 shares for the purpose of granting employee restricted stocks with par value of \$10 (in dollars) per shares, with the effective date filed with the regulator. The subscription price is \$0 (in dollar) per share. The employee restricted stocks issued are subject to certain transfer restrictions before their vesting conditions are met. Other than these restrictions, the rights and obligations of these shares issued are the same as other issued ordinary shares. On February 23, 2022, the Board of Directors resolved to grant 445,000 employee restricted stocks. As of December 31, 2022 the Company had retrieved 37,000 employee restricted stocks in total due to the employees' resignation and 27,000 stocks have been retired. Additionally, the remaining 10,000 retrieved stocks as of February 20, 2023, have not been retired.

F. The Company's GDRs began trading on the Luxembourg Stock Exchange on January 21, 2019. The actual number of units of GDRs for this offering was 1,600,000 and each GDR represents five of the Company's ordinary shares, which in the aggregate representing 8,000,000 ordinary shares. As of December 31, 2022, there was no outstanding GDRs.

The terms of GDR are as follows:

(a) Voting rights

The voting right of GDR holders may, pursuant to the Depositary Agreement and the relevant laws and regulations of the R.O.C., exercise the voting rights pertaining to the underlying common shares represented by the GDRs.

(b) Dividends, stocks warrant and other rights

GDR holders and common shareholders are all entitled to receive dividends, stock warrants and other rights.

G. On July 2, 2021, the shareholders' meeting resolved to increase cash capital by issuing ordinary shares through private placement. The capital increase base date was December 24, 2021. The purpose of the cash capital increase is to expand the operating scale and strengthen the financial structure and market competitiveness. The number of private placement shares was 20,000,000 shares, and the subscription price per share was NT\$40.79. This private placement capital increase had been fully collected for \$815,800 thousand and was delivered on January 18, 2022. The rights and obligations of this private placement of ordinary shares are the same as those of the Company's issued ordinary shares, except that the Article 43-8 of the Securities and Exchange Act is subject to the restriction of transfer within three years after delivery.

H. Treasury stocks

(a) Reason for share repurchase and the number of the Company's treasury stocks are as follows:  
December 31, 2022 : None.

Name of company holding the shares	Reason for repurchase	December 31, 2021	
		Number of shares	Carrying amount
The Company	To be reissued to employees	250,000	\$ 12,955

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

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

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

(17) Capital surplus

Capital surplus can be used to cover accumulated deficit or distributed as dividend as proposed by the Board of Directors and resolved by the shareholders.

	2022					
	Share premium	Employee stock options	Employee restricted stocks	Recognized changes in equity of associates	Others	Total
At January 1	\$ 1,969,083	\$ 68,963	\$ 28,133	\$ 833,545	\$ 37,605	\$ 2,937,329
Compensation costs of share-based payment	-	15,748	-	-	-	15,748
Issuance of restricted stocks to employees	-	-	16,039	-	-	16,039
Retirement of restricted stocks to employees	-	-	( 3,511)	-	-	( 3,511)
Exercise of employee stock options	3,492	( 2,425)	-	-	-	1,067
Restricted stocks to employees vested	14,185	-	( 14,185)	-	-	-
Employee stock option forfeited	-	( 4,897)	-	-	4,897	-
Recognized changes in equity of associates	-	-	-	( 137,081)	-	( 137,081)
Treasury stock retired	( 4,448)	-	-	-	-	( 4,448)
At December 31	<u>\$ 1,982,312</u>	<u>\$ 77,389</u>	<u>\$ 26,476</u>	<u>\$ 696,464</u>	<u>\$ 42,502</u>	<u>\$ 2,825,143</u>

	2021					
	Share premium	Employee stock options	Employee restricted stocks	Recognized changes in equity of associates	Others	Total
At January 1	\$ 1,345,647	\$ 69,544	\$ 33,795	\$ 220,066	\$ 34,468	\$ 1,703,520
Issuance of capital increase- private placement	615,800	-	-	-	-	615,800
Compensation costs of share-based payment	-	5,244	-	-	-	5,244
Issuance of restricted stocks to employees	-	-	16,732	-	-	16,732
Restricted stocks to employees vested	19,941	-	( 19,941)	-	-	-
Retirement of restricted stocks to employees	-	-	( 2,453)	-	-	( 2,453)
Exercise of employee stock option	4,452	( 2,688)	-	-	-	1,764
Employee stock option forfeited	-	( 3,137)	-	-	3,137	-
Recognized adjustments arising from changes in percentage of ownership in associates	-	-	-	613,479	-	613,479
Treasury stock retired	( 16,757)	-	-	-	-	( 16,757)
At December 31	<u>\$ 1,969,083</u>	<u>\$ 68,963</u>	<u>\$ 28,133</u>	<u>\$ 833,545</u>	<u>\$ 37,605</u>	<u>\$ 2,937,329</u>

(18) Retained earnings

- A. Under the Company's Articles of Incorporation, the current year's earnings, if any, shall first be used to pay all taxes and offset losses incurred in previous years and then a special reserve as required by the applicable securities authority under the applicable public company rules in Taiwan. After combining accumulated undistributed earnings in the previous years and setting aside a certain amount of remaining profits of such financial year as a reserve or reserves for development purposes as the Board of Directors may from time to time deem appropriate, subject to the compliance with the Cayman Islands Companies Law, the Company shall distribute no less than 10% of the remaining profit as dividends to the shareholders. The stipulates distribution of earnings by way of cash dividends should be approved by the Company's Board of Directors and reported to the Company's shareholders in its meeting.
- B. The Company's dividend policy is as follows: As the Company operates in a capital intensive industry and in the stable growth stage, the residual dividend policy is adopted taking into consideration the Company's operation scale, cash flow demand and future expansion plans, and cash dividends shall account for at least 10% of the total dividends distributed.

C. The Company's shareholders at the meeting on July 2, 2021 resolved not to distribute dividends from the appropriations of 2020 earnings.

Considering the Company's future operating development, the Company's shareholders at the meeting on May 20, 2022 resolved not to distribute dividends from the appropriations of 2021 earnings.

On February 20, 2023, after considering the Company's future operating development, the Board of Directors resolved 2022 deficit compensation proposal to use capital surplus of \$229,734 to make up the deficits. The above is still subject to the resolution of the shareholders' meeting.

Information about the appropriations of earnings resolved by the shareholders will be posted in the "Market Observation Post System" at the website of the Taiwan Stock Exchange.

(19) Other equity interest

	2022				Total
	Currency translation differences	Share of other comprehensive income (loss) of subsidiaries, associate and joint ventures accounted for using equity method, financial statements translation differences of foreign operations	Unearned employee compensation		
At January 1	(\$ 328,568)	\$ 79,957	(\$ 5,432)		(\$ 254,043)
Currency translation differences					
-Group	455,718	( 13,750)	-		441,968
-Associates	-	( 199,966)	-		( 199,966)
-Associates- transfer to net loss from disposal of investments	-	4,171	-		4,171
Compensation costs of share-based payment	-	-	14,129		14,129
Issuance of restricted stocks to employees	-	-	( 20,489)		( 20,489)
Retirement of restricted stocks to employees	-	-	4,471		4,471
At December 31	<u>\$ 127,150</u>	<u>(\$ 129,588)</u>	<u>(\$ 7,321)</u>		<u>(\$ 9,759)</u>

	Share of other comprehensive income of subsidiaries, associate and joint ventures accounted for using equity method, financial statements translation differences of foreign operations				Unearned employee compensation	Total
	Currency translation differences					
At January 1	(\$ 223,767)	\$	83,099	(\$ 10,762)	(\$ 151,430)	
Currency translation differences						
-Group	( 104,801)		2,716	-	( 102,085)	
-Associates	-		23,416	-	23,416	
-Group- transfer to net loss from disposal of a subsidiary	-		252	-	252	
-Associates- transfer to net income from disposal of investments	- (		29,526)	- (	29,526)	
Compensation costs of share-based payment	-		-	23,229	23,229	
Issuance of restricted stocks to employees	-		-	( 21,002)	( 21,002)	
Retirement restricted stocks from employees	-		-	3,103	3,103	
At December 31	<u>(\$ 328,568)</u>	<u>\$</u>	<u>79,957</u>	<u>(\$ 5,432)</u>	<u>(\$ 254,043)</u>	

(20) Operating revenue

	Years ended December 31,	
	2022	2021
Revenue from contracts with customers	<u>\$ 1,333,810</u>	<u>\$ 1,235,881</u>

## A. Disaggregation of revenue from contracts with customers

The Group derives revenue from the transfer of goods at a point in time in the following major product lines and geographical regions:

	Year ended December 31, 2022		
	Sales revenue	Royalty revenue	Total
United States	\$ 561,755	\$ -	\$ 561,755
China	499,788	-	499,788
Taiwan	20,155	634	20,789
Others	251,478	-	251,478
	<u>\$ 1,333,176</u>	<u>\$ 634</u>	<u>\$ 1,333,810</u>

	Year ended December 31, 2021		
	Sales revenue	Royalty revenue	Total
China	\$ 501,940	\$ 2,324	\$ 504,264
United States	530,928	-	530,928
Taiwan	33,508	4,048	37,556
Others	163,133	-	163,133
	<u>\$ 1,229,509</u>	<u>\$ 6,372</u>	<u>\$ 1,235,881</u>

#### B. Contract liabilities

The Group has recognized the following revenue-related contract liabilities:

	December 31, 2022	December 31, 2021	January 1, 2021
Contract liabilities			
– advance sales receipts	<u>\$ 12,516</u>	<u>\$ 21,752</u>	<u>\$ 14,815</u>

Revenue recognized that was included in the contract liability balance at the beginning of the years:

	Years ended December 31,	
	2022	2021
Contract liabilities – advance sales receipts	<u>\$ 16,995</u>	<u>\$ 12,591</u>

#### (21) Other gains and losses

	Years ended December 31,	
	2022	2021
Gain on disposal of property, plant and equipment	\$ 6,660	\$ 17,064
(Loss) gain on disposal of investments	( 4,171)	29,526
Gain on disposal of a subsidiary	-	12,890
Net currency exchange losses (gains)	( 29,124)	1,853
Impairment loss of non-financial assets	-	( 1,070)
Impairment loss of intangible assets	( 41,816)	( 42,074)
Other losses	( 9,562)	( 1,982)
	<u>(\$ 78,013)</u>	<u>\$ 16,207</u>

#### (22) Finance costs

	Years ended December 31,	
	2022	2021
Interest expense	\$ 11,640	\$ 4,196
Leased liabilities - interest expense	450	436
	<u>\$ 12,090</u>	<u>\$ 4,632</u>

(23) Expenses by nature

	Years ended December 31,	
	2022	2021
Employee benefit expense	\$ 654,965	\$ 567,216
Depreciation charges on property, plant and equipment and right-of-use assets	\$ 124,528	\$ 112,165
Amortization charges on intangible assets	\$ 6,878	\$ 6,471

(24) Employee benefit expense

	Years ended December 31,	
	2022	2021
Wages and salaries	\$ 552,907	\$ 470,251
Compensation costs of share-based payment	29,877	28,473
Insurance expenses	51,688	50,352
Pension costs	17,100	16,164
Other personnel expenses	3,393	1,976
	\$ 654,965	\$ 567,216

- A. According to the Articles of Incorporation of the Company, when distributing earnings, an amount equal to the ratio of distributable profit of the current year, after covering accumulated losses, shall be distributed as employees' compensation and directors' remuneration. The ratio shall not be higher than 15% and lower than 5% for employees' compensation and shall not be higher than 2% for directors' remuneration.
- B. For the years ended December 31, 2022 and 2021, the Company did not accrue employees' compensation and directors' remuneration, due to net loss before tax.
- C. Information about employees' compensation and directors' remuneration of the Company as proposed by the Board of Directors and resolved by the shareholders will be posted in the "Market Observation Post System" at the website of the Taiwan Stock Exchange.



(25) Income tax

A. Income tax benefit

Components of income tax benefit

	Years ended December 31,	
	2022	2021
Current tax:		
Current tax on profit for the year	\$ 5,720	(\$ 1,039)
Prior year income tax over estimation	-	(19,154)
Total current tax	5,720	(20,193)
Deferred tax:		
Origination and reversal of temporary differences	(17,704)	11,480
Total deferred tax	(17,704)	11,480
Income tax benefit	(\$ 11,984)	(\$ 8,713)

B. Reconciliation between income tax benefit and accounting profit

	Years ended December 31,	
	2022	2021
Tax calculated based on (loss) profit before tax and statutory tax rate (note)	(\$ 72,929)	\$ 6,321
Expenses disallowed by tax regulation	14,784	9,798
Tax exempt income by tax regulation	-	(22,795)
Change in assessment of realization of deferred tax assets	46,161	17,117
Prior year income tax over estimation	-	(19,154)
Income tax benefit	(\$ 11,984)	(\$ 8,713)

Note: The basis for computing the applicable tax rate are the rates applicable in the respective countries where the Group entities operate.

C. Amounts of deferred tax assets or liabilities as a result of temporary differences and tax losses are as follows:

	2022			
	January 1	Recognized in profit or loss	Recognized in other comprehensive income	December 31
— Deferred tax assets:				
Temporary differences:				
Unrealized allowance for inventory decline in market value	\$ 16,834	(\$ 1,905)	\$ -	\$ 14,929
State tax paid	797	( 795)	-	2
Accrued unused compensated absences	5,949	651	-	6,600
Other	33,779	845	-	34,624
Losses carryforwards - Taiwan tax	1,580	( 1,580)	-	-
Research and development expense tax credit	44,845	26,852	-	71,697
Subtotal	<u>\$ 103,784</u>	<u>\$ 24,068</u>	<u>\$ -</u>	<u>\$ 127,852</u>
— Deferred tax liabilities:				
Depreciation - U.S. Federal tax	(\$ 51,845)	(\$ 5,675)	\$ -	(\$ 57,520)
Depreciation - U.S. state tax	( 7,225)	( 792)	-	( 8,017)
Other	( 103)	103	-	-
Subtotal	<u>(\$ 59,173)</u>	<u>(\$ 6,364)</u>	<u>\$ -</u>	<u>(\$ 65,537)</u>
Total	<u>\$ 44,611</u>	<u>\$ 17,704</u>	<u>\$ -</u>	<u>\$ 62,315</u>

	2021			
	January 1	Recognized in profit or loss	Recognized in other comprehensive income	December 31
– Deferred tax assets:				
Temporary differences:				
Unrealized allowance for inventory decline in market value	\$ 14,260	\$ 2,574	\$ -	\$ 16,834
State tax paid	4,354	( 3,557)	-	797
Accrued unused compensated absences	6,121	( 172)	-	5,949
Other	30,010	3,769	-	33,779
Losses carryforwards - Taiwan tax	1,580	-	-	1,580
Research and development expense tax credit	60,442	( 15,597)	-	44,845
Subtotal	<u>\$ 116,767</u>	<u>(\$ 12,983)</u>	<u>\$ -</u>	<u>\$ 103,784</u>
– Deferred tax liabilities:				
Depreciation - U.S. Federal tax	(\$ 53,137)	\$ 1,292	\$ -	(\$ 51,845)
Depreciation - U.S. state tax	( 7,434)	209	-	( 7,225)
Other	( 103)	-	-	( 103)
Subtotal	<u>(\$ 60,674)</u>	<u>\$ 1,501</u>	<u>\$ -</u>	<u>(\$ 59,173)</u>
Total	<u>\$ 56,093</u>	<u>(\$ 11,482)</u>	<u>\$ -</u>	<u>\$ 44,611</u>

D. Through December 31, 2022, the assessment of income tax returns of the Taiwan subsidiaries are as follows:

Name of subsidiary	Assessment of income tax returns
Global Device Technologies, Co., Ltd.	Assessed and approved up to 2020
D-Tech Optoelectronics (Taiwan) Corporation	Assessed and approved up to 2020
GCOM Semiconductor Co., Ltd.	Assessed and approved up to 2020

(26) Losses per share

Details of ordinary stocks, losses per share are as follows:

	Year ended December 31, 2022		
	Amount after tax	Weighted average outstanding stocks (in thousand of shares)	Losses per share (in dollars)
<u>Basic losses per share</u>			
Losses attributable to ordinary shareholders of the parent (Note)	<u>(\$ 939,717)</u>	<u>\$ 110,148</u>	<u>(\$ 8.53)</u>

	Year ended December 31, 2021		
	Amount after tax	Weighted average outstanding stocks (in thousand of shares)	Losses per share (in dollars)
<u>Basic losses per share</u>			
Losses attributable to ordinary shareholders of the parent (Note)	(\$ 378,497)	90,016	(\$ 4.20)

Note: The employees' compensation, employee stock options and employee restricted stocks have anti-dilutive effect for the years ended December 31, 2022 and 2021, as a result, would not be considered while calculating the diluted EPS.

(27) Supplemental cash flow information

A. Investing activities with partial cash payments:

	Years ended December 31,	
	2022	2021
Acquisition of property, plant and equipment	\$ 205,022	\$ 98,238
Add: Ending balance of prepayments for equipment (Note 1)	67,556	41,431
Less: Beginning balance of prepayments for equipment (Note 1)	( 41,431)	-
Less: Ending balance of payables for equipment	( 5,775)	( 6,901)
Add: Beginning balance of payables for equipment	6,901	389
Cash paid	\$ 232,273	\$ 133,157

Note 1 : Shown as "Other non-current assets".

	Years ended December 31,	
	2022	2021
Acquisition of investment accounted for using the equity method	\$ 1,586,227	\$ 540,680
Less: Ending balance of payable for investment (Note 2)	( 191,137)	-
Cash paid	\$ 1,395,090	\$ 540,680

Note 2 : Shown as "Other payables".

B. Investing activities with partial cash receivable:

	Years ended December 31,	
	2022	2021
Proceeds from disposal of property, plant and equipment	\$ 39,039	\$ 119,160
Add: Opening balance of receivables from disposal of equipment (Note)	15,689	-
Less: Ending balance of receivables from disposal of equipment (Note)	( 5,682)	( 15,689)
Cash received	<u>\$ 49,046</u>	<u>\$ 103,471</u>

Note : Shown as “Other receivable-related party”.

- C. The Group disposed all the shares of the subsidiary, Changzhou Galasemi Co., Ltd., in July 2021 so that the Group lost its control over the subsidiary. Starting from the disposal date, Changzhou Galasemi Co., Ltd. is no longer included in the Group’s consolidated financial statements. The Group recognized gains on disposal of a subsidiary of \$12,890 presented as other gains or losses in the Statements of Comprehensive Income. The details of the consideration received from the transaction and assets and liabilities relating to the subsidiary are as follows:

	July 15, 2021
Consideration received	
Cash	<u>\$ 54,314</u>
Carrying amount of the assets and liabilities of the subsidiary	
Cash	\$ 24,675
Other receivables	19
Inventories	4,551
Prepayments	16,600
Property, plant and equipment	41,931
Intangible assets	232
Accounts payable	( 292)
Other payables	( 46,542)
Total net assets	<u>\$ 41,174</u>
The shareholding ratio held by the Group on disposal date	100%
Book value on disposal date	<u>\$ 41,174</u>
December 31, 2022 : None.	

(28) Changes in liabilities from financing activities

	Short-term borrowings	Lease liabilities	Long-term borrowings (including current portion)	Liabilities from financing activities
At January 1, 2022	\$ 20,000	\$ 3,393	\$ 198,965	\$ 222,358
Changes in cash flow from financing activities	-	( 7,562)	149,638	142,076
Interest expense	-	450	-	450
Interest paid	-	( 450)	-	( 450)
Changes in other non-cash items	-	27,430	-	27,430
Forgiveness of Paycheck Protection Plan	-	-	( 5,408)	( 5,408)
Net exchange differences	-	977	29,192	30,169
At December 31, 2022	<u>\$ 20,000</u>	<u>\$ 24,238</u>	<u>\$ 372,387</u>	<u>\$ 416,625</u>

	Short-term borrowings	Lease liabilities	Long-term borrowings (including current portion)	Liabilities from financing activities
At January 1, 2021	\$ 20,000	\$ 9,536	\$ 129,821	\$ 159,357
Changes in cash flow from financing activities	-	( 5,945)	161,170	155,225
Interest expense	-	436	-	436
Interest paid	-	( 436)	-	( 436)
Forgiveness of Paycheck Protection Plan	-	-	( 87,633)	( 87,633)
Net exchange differences	-	( 198)	( 4,393)	( 4,591)
At December 31, 2021	<u>\$ 20,000</u>	<u>\$ 3,393</u>	<u>\$ 198,965</u>	<u>\$ 222,358</u>

7. RELATED PARTY TRANSACTIONS

(1) Names of related parties and relationship

<u>Names of related parties</u>	<u>Relationship with the Company</u>
Unikorn Semiconductor Corporation ("Unikorn")	The investee company accounted for using the equity method by the Company
Changzhou Chemsemi Co., Ltd. ("Chemsemi")	The investee company accounted for using the equity method by the Company
Shanghai Galasemi Co., Ltd. ("Shanghai Galasemi")	The investee company accounted for using the equity method by the Company
Changzhou Galasemi Co., Ltd. ("Changzhou Galasemi")	The subsidiary wholly owned by the investee company accounted for using the equity method by the Company (Note)

Note: The Company sold all its shares in the subsidiary, Changzhou Galasemi Co., Ltd., to Shanghai Galasemi Co., Ltd. in July 2021.

(2) Significant related party transactions and balances

A. Operating revenue:

	<u>Year ended December 31,</u> <u>2022</u>
Operating revenue	
Sales of goods:	
Changzhou Galasemi	\$ <u>20,485</u>

December 31, 2021: None.

B. Purchases:

	<u>Year ended December 31,</u> <u>2022</u>
Purchases of goods:	
Changzhou Galasemi	\$ 683
Unikorn	<u>644</u>
	<u>\$ 1,327</u>

December 31, 2021: None.

C. Receivables from related parties:

	<u>December 31, 2022</u>	<u>December 31, 2021</u>
Accounts receivable:		
Changzhou Galasemi	\$ 2,958	\$ 2,913
Other receivable —		
Sales of machinery and equipment:		
Changzhou Galasemi	5,682	15,689
Other receivables — Other:		
Unikorn	-	65
Changzhou Galasemi	<u>302</u>	<u>-</u>
	<u>\$ 8,942</u>	<u>\$ 18,667</u>

Accounts receivables arise mainly from sales transactions. Other receivables arise mainly from equipment test services, and sales of machinery and miscellaneous equipment. The accounts receivable and other receivables are unsecured in nature and bear no interest.

D. Payables to related parties:

	<u>December 31, 2022</u>
Other payables:	
Unikorn	\$ <u>2,705</u>

December 31, 2021 : None.

E. Property transactions:

(a) Disposal of equipment:

	Year ended December 31, 2022		Year ended December 31, 2021	
	Disposal proceeds	Gain (loss) on	Disposal proceeds	Gain (loss) on
		disposal		disposal
Unikorn	\$ 25,887	\$ -	\$ 77,532	\$ 5,961
Changzhou Galasemi	6,913	1,766	15,745	-
	<u>\$ 32,800</u>	<u>\$ 1,766</u>	<u>\$ 93,277</u>	<u>\$ 5,961</u>

(b) The Company participated in the investee accounted for using equity method – Unikorn’s increase of common stocks for cash in 2022 and 2021. The details of the transaction are as follows:

Transaction company	Accounts	No. of shares	Objects	Year ended December 31,
				2022
				Consideration
Unikorn	Investments accounted for using equity method	35,000,000	Common Stocks	<u>\$ 700,000</u>
				Year ended December 31,
				2021
				Consideration
Unikorn	Investments accounted for using equity method	40,000,000	Common Stocks	<u>\$ 400,000</u>

(c) The Company participated in the investee accounted for using equity method – Chemsemi’s increase of equity for cash in 2022. The details of the transaction are as follows:

Transaction company	Accounts	No. of shares	Objects	Year ended December 31,
				2022
				Consideration
Chemsemi	Investments accounted for using equity method	Note	Equity of Chemsemi	<u>\$ 695,090</u>

Note: Please refer to Note 6(5).

December 31, 2021: None.



- (d) The Company sold all its shares in the subsidiary, Changzhou Galasemi Co., Ltd., to Shanghai Galasemi Co., Ltd. in 2021. The transaction is as follows:

Trading partner company	Accounts	Year ended December 31, 2021	
		Proceeds	Gain/(loss)
Shanghai Galasemi	Investments accounted for using equity method	\$ 54,314	\$ 12,890

According to the abovementioned transaction, the Group lost its control over Changzhou Galasemi Co., Ltd. Therefore, parts of gains on disposal of machinery and equipment by the Group to Changzhou Galasemi Co., Ltd. in prior years have been transferred to realized gains on disposal of property, plant and equipment. As of December 31, 2021, unrealized gain on disposal of property, plant and equipment amounted to \$10,400 and was recognized in deduction of investments accounted for using the equity method.

December 31, 2022 : None.

- (e) The Company participated in the investee accounted for using equity method – Shanghai Galasemi’s increase of common stocks for cash in 2021. The details of the transaction are as follows:

Transaction company	Accounts	No. of shares	Objects	Year ended December 31, 2021
				Consideration
Shanghai Galasemi	Investments accounted for using equity method	Note	Equity of Shanghai Galasemi	\$ 56,045

Note: Please refer to Note 6(5).

December 31, 2022 : None.

F. Other transactions:

Transaction company	Item	Transaction amounts	
		Years ended December 31,	
		2022	2021
Unikorn	Outsourcing manufacturing services charges	\$ 55,043	\$ 13,170

### (3) Key management compensation

	Years ended December 31,	
	2022	2021
Salaries and other short-term employee benefits	\$ 76,155	\$ 61,470
Post-employment benefits	2,429	2,192
Compensation costs of share-based payment	6,311	7,576
	<u>\$ 84,895</u>	<u>\$ 71,238</u>

### 8. PLEDGED ASSETS

As of December 31, 2022 and 2021, the Group's assets pledged as collateral were as follows:

Assets	December 31, 2022	December 31, 2021	Purpose
Investments accounted for using equity method	\$ 94,786	\$ -	Garantee for equity transfer payment
Land	141,420	127,466	Long-term borrowings
Buildings	74,302	69,399	Long-term borrowings
Time deposits (Shown as "Other current assets")	33,114	29,760	Short-term borrowings
Time deposits (Shown as "Other non-current assets")	300	300	Custom guarantee for imported goods
Refundable deposits (Shown as "Other current asset" and "Other non-current assets")	2,582	2,372	Deposits for office rental and waste water treatment

### 9. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED CONTRACT COMMITMENTS

Capital expenditures contracted for at the balance sheet date but not yet incurred are as follows:

	December 31, 2022	December 31, 2021
Property, plant and equipment	<u>\$ 72,564</u>	<u>\$ -</u>

### 10. SIGNIFICANT DISASTER LOSS

None.

### 11. SIGNIFICANT EVENTS AFTER THE REPORTING PERIOD

The 2022 deficit compensation proposal had been resolved by the Board of Directors on February 20, 2023. Please refer to Note 6(18).

### 12. OTHERS

#### (1) Capital management

In order to safeguard the Group's ability to adapt to the changes in the industry and to accelerate the new product development, the Company's objective when managing capital is to maintain sufficient financial resources to support the operating capital, capital expenditures, research and development activities, repayment of debts and dividend paid to shareholders, etc.

(2) Financial instruments

A. Financial instruments by category

	<u>December 31, 2022</u>	<u>December 31, 2021</u>
<u>Financial assets</u>		
Financial assets measured at fair value through other comprehensive income		
Designation of equity instrument	\$ 1,397	\$ -
Financial assets at amortized cost		
Cash and cash equivalents	442,196	1,839,765
Accounts receivable (including related parties)	202,474	158,786
Other receivables (including related parties)	9,827	19,509
Refundable deposits	2,582	2,372
Time deposits (over three-month period) (Shown as “Other current assets” and “Other-current assets”)	33,414	30,060
	<u>\$ 691,890</u>	<u>\$ 2,050,492</u>
<u>Financial liabilities</u>		
Financial liabilities at amortized cost		
Short-term borrowings	\$ 20,000	\$ 20,000
Accounts payable (including related parties)	7,810	1,682
Other payables (including related parties)	303,726	96,763
Long-term borrowings (including current portion)	372,387	198,965
	<u>\$ 703,923</u>	<u>\$ 317,410</u>
Lease liabilities	<u>\$ 24,238</u>	<u>\$ 3,393</u>

B. Financial risk management policies

- (a) The Group’s activities expose it to a variety of financial risks: market risk (including foreign exchange risk and price risk), credit risk and liquidity risk.
- (b) Risk management is carried out by the Group’s finance team under policies approved by the Board of Directors. The Group’s finance team identifies, evaluates and hedges financial risks in close cooperation with the Group’s operating units.

C. Significant financial risks and degrees of financial risks

(a) Market risk

Foreign exchange risk

- i. The Group operates internationally and is exposed to foreign exchange risk arising from the transactions of the Company and its subsidiaries used in various functional currency, primarily with respect to the USD and NTD. Foreign exchange risk arises from future commercial transactions and recognized assets and liabilities.

- ii. The Group's businesses involve some non-functional currency operations (the Company's and certain subsidiaries' functional currency: USD; other certain subsidiaries' functional currency: NTD). The information on assets and liabilities denominated in foreign currencies whose values would be materially affected by the exchange rate fluctuations is as follows:

December 31, 2022			
	Foreign currency amount (in thousands)	Exchange rate	Book value (NTD)
(Foreign currency: functional currency)			
<u>Financial assets</u>			
<u>Monetary items</u>			
NTD:USD	\$ 116,147	0.033	\$ 116,147
<u>Non-monetary items</u>			
NTD:USD	662,368	0.033	662,368
RMB:USD	404,375	0.144	1,784,246
December 31, 2021			
	Foreign currency amount (in thousands)	Exchange rate	Book value (NTD)
(Foreign currency: functional currency)			
<u>Financial assets</u>			
<u>Monetary items</u>			
NTD:USD	\$ 827,761	0.036	\$ 827,761
<u>Non-monetary items</u>			
NTD:USD	213,872	0.036	213,872
RMB:USD	339,829	0.157	1,476,681

- iii. The total exchange loss (gain), including realized and unrealized arising from significant foreign exchange variation on the monetary items held by the Group for years ended December 31, 2022 and 2021, amounted to \$29,124 and (\$1,853), respectively.

iv. Analysis of foreign currency market risk arising from significant foreign exchange variation:

	Year ended December 31, 2022		
	Sensitivity analysis		
	Degree of variation	Effect on profit or loss	Effect on other comprehensive income
(Foreign currency: functional currency)			
<u>Financial assets</u>			
<u>Monetary items</u>			
NTD:USD	1%	\$ 1,161	\$ -
<u>Non-monetary items</u>			
NTD:USD	1%	-	6,624
RMB:USD	1%	-	17,842

	Year ended December 31, 2021		
	Sensitivity analysis		
	Degree of variation	Effect on profit or loss	Effect on other comprehensive income
(Foreign currency: functional currency)			
<u>Financial assets</u>			
<u>Monetary items</u>			
NTD:USD	1%	\$ 8,278	\$ -
<u>Non-monetary items</u>			
NTD:USD	1%	-	2,139
RMB:USD	1%	-	14,767

(b) Credit risk

- i. Credit risk refers to the risk of financial loss to the Group arising from default by the clients or counterparties of financial instruments on the contract obligations. The main factor is that counterparties could not repay in full the accounts receivable based on the agreed terms, and the credit risk of financial assets at amortized cost.
- ii. The Group manages their credit risk taking into consideration the entire group's concern. For banks and financial institutions, only independently rated parties with a minimum rating of "BBB+" are accepted. According to the Group's credit policy, each local entity in the Group is responsible for managing and analyzing the credit risk for each of their new clients before standard payment and delivery terms and conditions are offered. Internal risk control assesses the credit quality of the customers, taking into account their financial position, past experience and other factors. Individual risk limits are set based on internal or external ratings in accordance with limits set by the Board of Directors. The utilization of credit limits is regularly monitored.
- iii. The Group does not hold any collateral as security for accounts receivable. As of December 31, 2022 and 2021, with no collateral held or other credit enhancements, the maximum exposure to credit risk in respect of the Group's accounts receivable was \$202,474 and \$158,786, respectively.

- iv. The Group adopts the assumption under IFRS 9, that is, the default occurs when the contract payments are past due over 90 days.
- v. The Group adopts the assumption under IFRS 9 to assess whether there has been a significant increase in credit risk on that instrument since initial recognition:  
If the contract payment were past due over 30 days, based on the terms, there would be a significant increase in credit risk on that instrument since initial recognition.
- vi. The following indicators are used to determine whether the credit impairment of debt instruments has occurred:
- It becomes probable that the issuer will enter bankruptcy or other financial reorganization due to their financial difficulties;
  - The disappearance of an active market for that financial asset because of financial difficulties.
- vii. The Group wrote off the financial assets, which cannot be reasonably expected to be recovered, after initiating recourse procedures. However, the Group will continue executing the recourse procedures to secure their rights.
- viii. Estimation of expected credit loss for accounts receivable:
- The Group classifies customers' accounts receivable in accordance with credit risk on trade. The Group applies the simplified approach using loss rate methodology to estimate expected credit loss.
  - The Group used the forecastability of external research report to adjust historical and timely information for a specific period to assess the default possibility of accounts receivable. As of December 31, 2022 and 2021, the loss rate methodology is as follows:

	Not past due	Less than			Total
		Less than 90 days past due	Less than 180 days and more than 90 days past due	More than 180 days past due	
<u>Accounts receivable</u>					
<u>At December 31, 2022</u>					
Expected loss rate	0%-1%	1%-15%	16%-31%	31%-100%	
Total book value	<u>\$ 197,698</u>	<u>\$ 32,611</u>	<u>\$ -</u>	<u>\$ 1,284</u>	<u>\$ 231,593</u>
Loss allowance	<u>\$ -</u>	<u>\$ 27,835</u>	<u>\$ -</u>	<u>\$ 1,284</u>	<u>\$ 29,119</u>

	Not past due	Less than			Total
		Less than 90 days past due	Less than 180 days and more than 90 days past due	More than 180 days past due	
<u>Accounts receivable</u>					
<u>December 31, 2021</u>					
Expected loss rate	0%-1%	1%-15%	16%-31%	31%-100%	
Total book value	<u>\$ 134,707</u>	<u>\$ 24,079</u>	<u>\$ -</u>	<u>\$ 1,157</u>	<u>\$ 159,943</u>
Loss allowance	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 1,157</u>	<u>\$ 1,157</u>

(c) Movements in relation to the Group applying the simplified approach to provide loss allowance for accounts receivable was as follows:

	<u>2022</u>
	<u>Accounts receivable</u>
At January 1	\$ 1,157
Provision for impairment loss	27,010
Effect of foreign exchange	952
At December 31	<u>\$ 29,119</u>
	<u>2021</u>
	<u>Accounts receivable</u>
At January 1	\$ 1,681
Provision for impairment loss	875
Write-offs due to uncollectible accounts receivable	( 1,308)
Effect of foreign exchange	( 91)
At December 31	<u>\$ 1,157</u>

viii. The Group used the forecastability of external research report to adjust historical and timely information for a specific period to assess the default possibility of other receivables (including related parties). As of December 31, 2022 and 2021, the loss rate methodology is as follows:

	<u>Not past due</u>
<u>At December 31, 2022</u>	
Expected loss rate	0% - 100%
Total book value	<u>\$ 9,827</u>
Loss allowance	<u>\$ -</u>
	<u>Not past due</u>
<u>At December 31, 2021</u>	
Expected loss rate	0% - 100%
Total book value	<u>\$ 19,509</u>
Loss allowance	<u>\$ -</u>

(c) Liquidity risk

- i. Cash flow forecasting is performed by the operating entities of the Group and aggregated by the Group's finance team. The Group's finance team monitors rolling forecasts of the Group's liquidity requirements to ensure the Group has sufficient cash to meet operational needs. Such forecasting takes into consideration the Group's debt financing plans, compliance with internal balance sheet ratio targets and, if applicable, external regulatory or legal requirements.

- ii. Surplus cash held by the operating entities over and above balance required for working capital management are managed for investment appropriately. The instruments chosen would be with appropriate maturities or sufficient liquidity to provide sufficient headroom as determined by the above-mentioned forecasts.
- iii. The Group has the following undrawn borrowing facilities:

	<u>December 31, 2022</u>	<u>December 31, 2021</u>
Floating rate:		
Expiring within one year	\$ <u>67,420</u>	\$ <u>6,000</u>

Note: The facilities expiring within one year are annual facilities subject to renegotiation before various due dates.

- iv. The table below analyzes the Group's non-derivative financial liabilities and net-settled or gross-settled derivative financial liabilities into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date for non-derivative financial liabilities and to the expected maturity date for derivative financial liabilities. The amounts disclosed in the table are the contractual undiscounted cash flows.

	<u>Less than 1 year</u>	<u>Over 1 year</u>
<u>Non-derivative financial liabilities:</u>		
December 31, 2022		
Short-term borrowings	\$ 20,240	\$ -
Accounts payable	7,810	-
Other payables (including related parties)	303,726	-
Lease liabilities	9,734	16,451
Long-term borrowings (including current portion)	56,583	385,909
	<u>Less than 1 year</u>	<u>Over 1 year</u>
<u>Non-derivative financial liabilities:</u>		
December 31, 2021		
Short-term borrowings	\$ 20,228	\$ -
Accounts payable	1,682	-
Other payables	96,763	-
Lease liabilities	3,463	-
Long-term borrowings (including current portion)	17,216	239,842

### (3) Fair value information

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

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date. A market is regarded as active where a market in which transactions for the asset or liability take place with sufficient frequency and



volume to provide pricing information on an ongoing basis.

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

Level 3: Unobservable inputs for the asset or liability.

**B. Financial instruments not measured at fair value**

The carrying amounts measured at amortized cost approximate the fair values of the Group's financial instruments, including cash and cash equivalents, accounts receivable, other receivables, refundable deposits, time deposits (over three-month period), short-term borrowings, current contract liabilities, accounts payable, other payables, lease liabilities, and long-term borrowings (including current portion).

**C. The related information of financial and non-financial instruments measured at fair value by level on the basis of the nature, characteristics and risks of the assets and liabilities is as follows:**

<u>December 31, 2022</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
<b>Assets</b>				
<u>Recurring fair value measurements</u>				
Financial assets at fair value through other comprehensive income	\$ -	\$ -	\$ 1,397	\$ 1,397

December 31, 2021: None.

**D. The following chart is the movement of Level 3 for year ended December 31, 2022:**

	<u>2022</u>
	<u>Equity instrument</u>
At January 1	\$ -
Acquired in the year	1,352
Effect of exchange rate changes	45
At December 31	<u>\$ 1,397</u>

December 31, 2021: None.

**E. For the years ended December 31, 2022 and 2021, there was no transfer into or out from Level 3.**

**F. The Group's accounting segment is in charge of valuation procedures for fair value measurements being categorised within Level 3, which is to verify independent fair value of financial instruments. Such assessment is to ensure the valuation results are reasonable by applying independent information to make results close to current market conditions, confirming the resource of information is independent, reliable and in line with other resources and represented as the exercisable price, and frequently calibrating valuation model, performing back-testing, updating inputs used to the valuation model and making any other necessary adjustments to the fair value.**

G. The following is the qualitative information of significant unobservable inputs and sensitivity analysis of changes in significant unobservable inputs to valuation model used in Level 3 fair value measurement:

	Fair value at December 31, 2022	Valuation technique	Significant unobservable input	Range (weighted average)	Relationship of inputs to fair value
Non-derivative equity instruments					
Unlisted Company Shares	\$ 1,397	Last transaction price	Not applicable	Not applicable	Not applicable

December 31, 2021: None.

(4) Others

The Company's significant subsidiary, Global Communication Semiconductors, LLC ("GCS LLC"), is located in Torrance, California, USA. Currently, the Company assessed that the pandemic has no significant impact on the Company's operating activities and financial statements.

13. SUPPLEMENTARY DISCLOSURES

(1) Significant transactions information

- (a) Loans to others: Please refer to table 1.
- (b) Provision of endorsements and guarantees to others: Please refer to table 2.
- (c) Holding of marketable securities at the end of the year (not including subsidiaries, associates and joint ventures): Please refer to table 3.
- (d) Acquisition or sale of the same security with the accumulated cost exceeding \$300 million or 20% of the Company's paid-in capital: Please refer to table 4.
- (e) Acquisition of real estate reaching \$300 million or 20% of paid-in capital or more: None.
- (f) Disposal of real estate reaching \$300 million or 20% of paid-in capital or more: None.
- (g) Purchases or sales of goods from or to related parties reaching \$100 million or 20% of paid-in capital or more: None.
- (h) Receivables from related parties reaching \$100 million or 20% of paid-in capital or more: None.
- (i) Derivative financial instruments: None.
- (j) Significant inter-company transactions: Please refer to table 9.

(2) Information on investees

Names, locations and other information of investee companies (not including investees in mainland China): Please refer to table 10.

(3) Information on investments in mainland China

- (a) Information on investments in mainland China: Please refer to table 11.
- (b) Significant transactions, either directly or indirectly through a third area, with investee companies in the Mainland Area: Please refer to Note 7.

(4) Major shareholders information

Major shareholders information: Please refer to table 12.

14. SEGMENT INFORMATION

(1) General information

The Company operates business only in a single industry. The Chief Operating Decision-Maker, who allocates resources and assesses performance of the Group as a whole, has identified that the Company has only one reportable operating segment.

(2) Segment information

The segment information provided to the Chief Operating Decision-Maker for the reportable segments is as follows:

	Years ended December 31,	
	2022	2021
Revenue from external customers	\$ 1,333,810	\$ 1,235,881
Inter-segment revenue	-	-
Total segment revenue	\$ 1,333,810	\$ 1,235,881
Segment loss (Note)	(\$ 951,701)	(\$ 387,210)

Note: Exclusive of income tax.

	December 31, 2022	December 31, 2021
Segment assets	\$ 4,516,914	\$ 4,901,994
Segment liabilities	\$ 816,192	\$ 402,754

(3) Reconciliation for segment income (loss)

The Company and its subsidiaries engage in a single industry. The Chief Operating Decision-Maker assesses performance and allocates resources of the whole group. The Company is regarded as a single operating segment. Therefore, there is no inter-segment revenue. The revenue from external parties reported to the Chief Operating Decision-Maker is measured in a manner consistent with that in the statement of comprehensive income. The amount provided to the Chief Operating Decision-Maker with respect to total assets is measured in a manner consistent with that in the balance sheet.

(4) Information on products and services

Please refer to Note 6 (20) for the related information.

(5) Geographical information

Geographical information for the years ended December 31, 2022 and 2021 is as follows:

	<u>Year ended December 31, 2022</u>		<u>Year ended December 31, 2021</u>	
	<u>Revenue</u>	<u>Non-current assets</u>	<u>Revenue</u>	<u>Non-current assets</u>
China	\$ 499,788	\$ 1,784,246	\$ 504,264	\$ 1,476,681
US	561,755	846,543	530,928	703,828
Taiwan	20,789	662,556	37,556	227,139
Others	251,478	-	163,133	-
	<u>\$ 1,333,810</u>	<u>\$ 3,293,345</u>	<u>\$ 1,235,881</u>	<u>\$ 2,407,648</u>

(6) Major customer information

Major customer information of the Group for the years ended December 31, 2022 and 2021 is as follows:

	<u>Year ended December 31, 2022</u>		<u>Year ended December 31, 2021</u>	
	<u>Revenue</u>	<u>Segment</u>	<u>Revenue</u>	<u>Segment</u>
H	\$ 349,511	The Group	\$ 336,081	The Group
I	191,523	The Group	123,296	The Group
J	Note	The Group	126,745	The Group

Note : Less than 10% of the Group's revenue.

GCS HOLDINGS, INC. AND SUBSIDIARIES

Loans to others

Year ended December 31, 2022

Table 1

Expressed in thousands of NTD

(Except as otherwise indicated)

No. (Note 1)	Creditor	Borrower	General ledger account	Is a related party	Maximum outstanding balance during the year ended December 31, 2022 (Note 3)	Balance at December 31, 2022	Actual amount drawn down	Interest rate	Nature of loan (Note 2)	Amount of transactions with the borrower	Reason for short-term financing	Allowance for doubtful accounts	Collateral Item Value		Limit on loans granted to a single party (Note 3)	Ceiling on total loans granted (Note 3)	Footnote
1	Global Communication Semiconductors, LLC	D-Tech Optoelectronics, Inc.	Other receivable - related parties	Yes	\$ 61,780	\$ 61,420	\$ 6,142	2%	2	\$ -	Operation	\$ -	None	\$ -	\$ 384,433	\$ 384,433	-
1	Global Communication Semiconductors, LLC	D-Tech Optoelectronics, Inc.	Other receivable - related parties	Yes	64,440	61,420	24,568	2%	2	-	Operation	-	None	-	384,433	384,433	Note 4
1	Global Communication Semiconductors, LLC	D-Tech Optoelectronics (Taiwan) Corporation	Other receivable - related parties	Yes	20,000	-	-	Settled by contract	2	-	Operation	-	None	-	384,433	384,433	-
1	Global Communication Semiconductors, LLC	GCS Holdings, Inc.	Other receivable - related parties	Yes	322,200	-	-	Settled by contract	2	-	Operation	-	None	-	384,433	384,433	-

Note 1: The numbers filled in for the loans provided by the Company or subsidiaries are as follows:

(1)The Company is '0'.

(2)The subsidiaries are numbered in order starting from '1'.

Note 2: The column of 'Nature of loan' shall fill in 'Business transaction or 'Short-term financing'.

(1)The business transaction is '1'.

(2)The short-term financing is '2'.

Note 3: According to the Company's "Procedures for Lending Funds to Other Parties", the total amount available for lending purpose shall not exceed forty percent (40%) of the net worth of the Company. The total amount for lending to a company having business relationship with the Company shall not exceed the total transaction amount between the parties during the period of twelve (12) months prior to the time of lending (For the purpose of this Procedure, the "transaction amount" shall mean the sales or purchasing amount between the parties, whichever is higher), and shall not exceed ten percent (10%) of the net worth of the Company. The total amount for lending to a company for funding for a short-term period shall not exceed ten percent (10%) of the net worth of the Company. In addition, the total amount lendable to any one borrower shall be no more than thirty percent (30%) of the borrower's net worth, provided that this restriction will not apply to subsidiaries whose voting shares are 100% owned, directly or indirectly, by the Company. The total amount for fund-lending between the subsidiaries whose voting shares are 100% owned, directly or indirectly, by the Company will not be subject to the limit of forty percent (40%) of the net worth of the lending subsidiary. The total amount of lending provided by the Company to any individual entities are limited to forty percent (40%) of the Company's net worth and the term of each loan shall not exceed one year.

Note 4: On November 5, 2021, the Company's Board of Directors resolved to approve Global Communication Semiconductors, LLC to loan to its subsidiary D-Tech Optoelectronics Inc. with the limitation amounted to USD2,000,000, and the actual expenditure was USD800,000. On November 1, 2022, the Company's Board of Directors resolved to approve Global Communication Semiconductors, LLC to loan to its subsidiary D-Tech Optoelectronics Inc. with the limitation amounted to USD2,000,000, and the actual expenditure was USD200,000.

GCS HOLDINGS, INC. AND SUBSIDIARIES  
Provision of endorsements and guarantees to others  
Year ended December 31, 2022

Table 2

Expressed in thousands of NTD  
(Except as otherwise indicated)

Number (Note 1)	Endorser/ guarantor	Party being endorsed/guaranteed Company name	Relationship with the endorser/ guarantor (Note 2)	Limit on endorsements/ guarantees provided for a single party (Note 3)	Maximum outstanding endorsement/ guarantee amount for the year ended December 31, 2022	Outstanding endorsement/ guarantee amount at December 31, 2022	Actual amount drawn down	Amount of endorsements/ guarantees secured with collateral	Ratio of accumulated endorsement/ guarantee amount to net asset value of the endorser/ guarantor company	Ceiling on total amount of endorsements/ guarantees provided (Note 3)	Provision of endorsements/ guarantees by parent company to subsidiary	Provision of endorsements/ guarantees by parent company	Provision of endorsements/ guarantees to the party in mainland China	Footnote
0	GCS Holdings, Inc.	GCS Device Technologies, Co., Ltd.	2	\$ 1,480,289	\$ 30,890	\$ 30,890	\$ 20,000	\$ 30,710	0.83%	\$ 1,480,289	Y	N	N	Note 4
0	GCS Holdings, Inc.	GCS Device Technologies, Co., Ltd.	2	1,480,289	32,000	-	-	-	0.00%	1,480,289	Y	N	N	Note 4

Note 1: The numbers filled in for the endorsements/guarantees provided by the Company or subsidiaries are as follows:

- (1)The Company is '0'.
- (2)The subsidiaries are numbered in order starting from '1'.

Note 2: Relationship between the endorser/guarantor and the party being endorsed/guaranteed is classified into the following seven categories; fill in the number of category each case belongs to:

- (1)Having with which it does business.
- (2)The endorser/guarantor parent company owns directly or indirectly more than 50% voting shares of the endorsed/guaranteed subsidiary.
- (3)The endorser/guarantor parent company owns directly or indirectly more than 50% voting shares of the endorsed/guaranteed company.
- (4)The endorsed/guaranteed parent company owns directly or indirectly more than jointly 90% voting shares of the endorser/guarantor company.
- (5)Mutual guarantee of the trade or co-contractor as required by the construction contract.
- (6)Due to joint venture, mutual shareholder provides endorsements/guarantees to the endorsed/guaranteed company in ratio to its ownership.
- (7)Companies in the same industry provide among themselves joint and several security for a performance guarantee of sales contract for pre-construction homes pursuant to the Consumer Protection Act for each other.

Note 3: According to the Company's "Procedures for Endorsement and Guarantee", the total amount of endorsement/guarantee provided by the Company is limited to forty percent (40%) of the Company's net worth, and the total amount of the guarantee provided by the Company to any individual entity is limited to ten percent (10%) of the Company's net worth. The total amount of the guarantee provided by the Company to any subsidiary whose voting shares are 100% owned, directly or indirectly, by the Company shall not exceed forty percent (40%) of the Company's net worth. The aggregate total amount of endorsement/guarantee provided by the Company and its subsidiaries shall not exceed fifty percent (50%) of the Company's net worth.

Note 4: The description of the endorsement guarantee for GCS Device Technologies, Co., Ltd. is as follows:

- (1). On November 5, 2021, the Company's Board of Directors resolved to provide an endorsement guarantee for the Company's subsidiary, GCS Device Technologies, Co., Ltd., which is required for the bank loan of GCS Device Technologies, Co., Ltd., and the amount is USD1,000,000. As of December 31, 2022, the actual expenditure is \$0.
- (2). Since the bank loan of GCS Device Technologies, Co., Ltd. would be due and extended in December 2022. On November 1, 2022, the Company's Board of Director resolved in advance to approve a endorsement guarantee amounted to USD1,000,000, as the requirement of the bank loan of GCS Device Technologies, Co., Ltd. As of December 31, 2022, the actual expenditure is \$20,000.

GCS HOLDINGS, INC.

Holding of marketable securities at the end of the year

December 31, 2022

Table 3

Expressed in thousands of NTD

(Except as otherwise indicated)

Securities held by	Marketable securities (Note 1)	Relationship with the securities issuer (Note 2)	General ledger account	As of December 31, 2022				Footnote (Note 4)
				Number of shares	Book value (Note 3)	Ownership (%)	Fair value	
Global Communication Semiconductors, LLC	ElectroPhotonic-IC Inc.	None.	Financial assets at fair value through other comprehensive income	41,617	\$ 1,397	0.29%	\$ 1,397	None

Note 1: Marketable securities in the table refer to stocks, bonds, beneficiary certificates and other related derivative securities within the scope of IFRS 9 'Financial instrument'.

Note 2: Leave the column blank if the issuer of marketable securities is non-related party.

Note 3: Fill in the amount after adjusted at fair value and deducted by accumulated impairment for the marketable securities measured at fair value;

fill in the acquisition cost or amortized cost deducted by accumulated impairment for the marketable securities not measured at fair value. marketable securities not measured at fair value.

GCS HOLDINGS, INC. AND SUBSIDIARIES

Acquisition or sale of the same security with the accumulated cost exceeding \$300 million or 20% of the Company's paid-in capital  
Year ended December 31, 2022

Table 4

Expressed in thousands of NTD  
(Except as otherwise indicated)

Investor	Marketable securities (Note 1)	General ledger account	Counterparty (Note 2)	Relationship with the investor (Note 2)	Balance as at January 1, 2022		Addition (Note 3)		Number of shares	Disposal (Note 3)			Balance as at December 31, 2022 (Note 5)		
					Number of shares	Amount	Number of shares	Amount		Selling price	Book value	Gain (loss) on disposal	Number of shares	Amount	
GCS Holdings, Inc.	Unikorn Semiconductor Corporation	Investment accounted for using equity method	Unikorn Semiconductor Corporation	Related party	96,400,000	\$ 213,872	35,000,000	\$ 700,000	-	\$ -	\$ -	\$ -	-	131,400,000	\$ 662,368
GCS Holdings, Inc.	Changzhou Chemsemi Co., Ltd.	Investment accounted for using equity method	Changzhou Chemsemi Co., Ltd.	Related party	Note 4	1,357,673	Note 4	886,227	-	-	-	-	-	Note 4	1,663,486

Note 1: Marketable securities in the table refer to stocks, bonds, beneficiary certificates and other related derivative securities.

Note 2: Fill in the columns the counterparty and relationship if securities are accounted for under the equity method; otherwise leave the columns blank.

Note 3: Aggregate purchases and sales amounts should be calculated separately at their market values to verify whether they individually reach NT\$300 million or 20% of paid-in capital or more.

Note 4: Changzhou Chemsemi Co., Ltd. is a limited company, so it is not applicable.

Note 5: The balance is included the addition of investments accounted for using the equity method, share of net loss of investments accounted for using the equity method and the net exchange differences.



GCS HOLDINGS, INC. AND SUBSIDIARIES  
Significant inter-company transactions during the reporting period  
Year ended December 31, 2022

Table 9

Expressed in thousands of NTD  
(Except as otherwise indicated)

Number (Note 1)	Company name	Counterparty	Relationship (Note 2)	Transaction		Percentage of consolidated total operating revenues or total assets (Note 3)	
				General ledger account	Amount		
1	D-Tech Optoelectronics (Taiwan) Corporation	Global Communication Semiconductors, LLC	3	Service revenue	\$ 27,387	Conducted in the ordinary course of business with terms similar to those with third parties	2.05%
1	D-Tech Optoelectronics (Taiwan) Corporation	Global Communication Semiconductors, LLC	3	Accounts receivable - related party	2,293	Conducted in the ordinary course of business with terms similar to those with third parties	0.05%
2	D-Tech Optoelectronics, Inc.	Global Communication Semiconductors, LLC	3	Accounts receivable - related party	949	Conducted in the ordinary course of business with terms similar to those with third parties	0.02%
2	D-Tech Optoelectronics, Inc.	Global Communication Semiconductors, LLC	3	Service revenue	11,309	Conducted in the ordinary course of business with terms similar to those with third parties	0.85%
2	D-Tech Optoelectronics, Inc.	Global Communication Semiconductors, LLC	3	Other payables - related party	31,024	Loans to other	0.69%
3	GCS Device Technologies, Co., Ltd.	Global Communication Semiconductors, LLC	3	Service revenue	9,253	Conducted in the ordinary course of business with terms similar to those with third parties	0.69%
3	GCS Device Technologies, Co., Ltd.	Global Communication Semiconductors, LLC	3	Accounts receivable - related party	2,072	Conducted in the ordinary course of business with terms similar to those with third parties	0.05%

Note 1: The numbers filled in for the transaction company in respect of inter-company transactions are as follows:

- (1)Parent company is '0'.
- (2)The subsidiaries are numbered in order starting from '1'.

Note 2: Relationship between transaction company and counterparty is classified into the following three categories; fill in the number of category each case belongs to (If transactions between parent company and subsidiaries or between subsidiaries refer to the same transaction, it is not required to disclose twice. For example, if the parent company has already disclosed its transaction with a subsidiary, then the subsidiary is not required to disclose the transaction; for transactions between two subsidiaries, if one of the subsidiaries has disclosed the transaction, then the other is not required to disclose the transaction.):

- (1)Parent company to subsidiary.
- (2)Subsidiary to parent company.
- (3)Subsidiary to subsidiary.

Note 3: Regarding percentage of transaction amount to consolidated total operating revenues or total assets, it is computed based on period-end balance of transaction to consolidated total assets for balance sheet accounts and based on accumulated transaction amount for the period to consolidated total operating revenues for income statement accounts.

Note 4: Disclosure over 1 million transaction details in this table.

GCS HOLDINGS, INC. AND SUBSIDIARIES  
Information on investees (not including investees in mainland China)  
Year ended December 31, 2022

Table 10

Expressed in thousands of NTD  
(Except as otherwise indicated)

Investor	Investee (Note 1、2)	Location	Main business activities	Initial investment amount		Shares held as at December 31, 2022			Net profit (loss) of the investee for year ended December 31, 2022 (Note 2(2))	Investment income (loss) recognized by the Company for the year ended December 31, 2022 (Note 2(3))	Footnote
				Balance as at December 31, 2022	Balance as at December 31, 2021	Number of shares	Ownership (%)	Book value			
GCS Holdings, Inc.	Global Communication Semiconductors, LLC	Los Angeles, USA	1. Manufacturing of compound semiconductor wafers and foundry related services as well as granting royalty rights for intellectual property 2. Manufacturing and selling of advanced optoelectronics technology products	\$ 403,975	\$ 403,975	-	100%	\$ 961,082	(\$ 134,405)	(\$ 134,405)	Subsidiary
GCS Holdings, Inc.	GCS Device Technologies, Co., Ltd.	Taiwan	Product design and research development services	12,000	12,000	-	100%	29,807	4,389	4,389	Subsidiary
GCS Holdings, Inc.	GCOM Semiconductor Co., Ltd.	Taiwan	Wholesaling and retailing of electronic components, product design, and outsourcing management services	50,000	50,000	5,000,000	100%	49,472	( 127)	( 127)	Subsidiary
GCS Holdings, Inc.	Unikorn Semiconductor Corporation	Taiwan	Specialized OEM of III-V compound semiconductors	1,664,000	964,000	131,400,000	42.06%	662,368	( 976,415)	( 448,361)	Investee company of parent company
Global Communication Semiconductors, LLC	D-Tech Optoelectronics, Inc.	Los Angeles, USA	Developing, manufacturing and selling of photodiodes and avalanche photodiodes for telecommunication systems and data communication networks	393,380	393,380	360,000	100%	128,045	( 65,327)	( 65,327)	Subsidiary
D-Tech Optoelectronics, Inc.	D-Tech Optoelectronics (Taiwan) Corporation	Taiwan	Manufacturing, retailing and wholesaling of telecommunications devices, and manufacturing and wholesaling of electronic components	89,840	89,840	5,800,000	100%	43,667	( 11,740)	( 11,740)	Subsidiary

Note 1: If a public company is equipped with an overseas holding company and takes consolidated financial report as the main financial report according to the local law rules, it can only disclose the information of the overseas holding company about the disclosure of related overseas investee information.

Note 2: If situation does not belong to Note 1, fill in the columns according to the following regulations:

- (1)The columns of 'Investee', 'Location', 'Main business activities', 'Initial investment amount' and 'Shares held as at December 31, 2022' should fill orderly in the Company's (public company's) information on investees and every directly or indirectly controlled investee's investment information, and note the relationship between the Company (public company) and its investee each (ex. direct subsidiary or indirect subsidiary) in the 'footnote' column.
- (2)The 'Net profit (loss) of the investee for the year ended December 31, 2022' column should fill in amount of net profit (loss) of the investee for this year.
- (3)The 'Investment income (loss) recognized by the Company for the year ended December 31, 2022' column should fill in the Company (public company) recognized investment income (loss) of its direct subsidiary and recognized investment income (loss) of its investee accounted for under the equity method for this period. When filling in recognized investment income (loss) of its direct subsidiary, the Company (public company) should confirm that direct subsidiary's net profit (loss) for this year has included its investment income (loss) which shall be recognized by regulations.

GCS HOLDINGS, INC.AND SUBSIDIARIES

Information on investments in mainland China

Year ended December 31, 2022

Table 11

Expressed in thousands of NTD

(Except as otherwise indicated)

Investee in mainland China	Main business activities	Paid-in capital	Investment method (Note 1)	Accumulated amount of remittance from Taiwan to mainland China as of December 31, 2022	Amount remitted from Taiwan to mainland China/ Amount remitted back to Taiwan for the year ended December 31, 2022		Accumulated amount of remittance from Taiwan to mainland China as of December 31, 2022	Net income of investee for the year ended December 31, 2022	Ownership held by the Company (direct or indirect)	Investment loss recognized by the Company for the year ended December 31, 2022(Note 5)	Book value of investments in mainland China as of December 31, 2022	Accumulated amount of investment income remitted back to Taiwan as of December 31, 2022	Footnote
					Remitted to mainland China	Remitted back to Taiwan							
Changzhou Chemsemi Co., Ltd.	Manufacturing and selling of semiconductor discrete devices, integrated circuit chips and related products; Designing and services of integrated circuit chips; Manufacturing and selling of optoelectronic device.	\$ 8,340,385	2	\$ -	\$ -	\$ -	\$ -	(\$ 1,151,847)	24.21%	\$ 285,471	\$ 1,663,486	\$ -	Note 2(2)B、 Note 4
Shanghai Galasemi Co., Ltd.	Technical services and development services in the field of optoelectronic technology, and selling of semiconductor discrete devices	294,516	2	-	-	-	-	( 1,235)	48.00%	134	120,760	-	Note 2(2)B、 Note 4
Company name	Accumulated amount of remittance from Taiwan to mainland China as of December 31, 2022	Investment amount approved by the Investment Commission of the Ministry of Economic Affairs (MOEA)	Ceiling on investments in mainland China imposed by the Investment Commission of MOEA										
Changzhou Chemsemi Co., Ltd.	\$ -	\$ -	\$ -										
Shanghai Galasemi Co., Ltd.	-	-	-										

Note 1: Investment methods are classified into the following three categories; fill in the number of category each case belongs to:

- (1) Directly invest in a company in mainland China.
- (2) Through investing in an existing company in the third area (GCS Holdings, Inc.), which then invested in the investee in mainland China.
- (3) Others

Note 2: In the 'Investment income (loss) recognized by the Company for December 31, 2022' column:

- (1) It should be indicated if the investee was still in the incorporation arrangements and had not yet any profit during this period.
- (2) Indicate the basis for investment income (loss) recognition in the number of one of the following three categories:
  - A. The financial statements that are audited and attested by international accounting firm which has cooperative relationship with accounting firm in R.O.C.
  - B. The financial statements that are audited and attested by R.O.C. parent company's CPA.
  - C. The financial statements prepared by the investee.

Note 3: The numbers in this table are expressed in New Taiwan Dollars.

Note 4: The Company was incorporated in Cayman Islands and continuously transferred the investments from the Company's U.S. bank account to Changzhou Chemsemi Co., Ltd. and Shanghai Galasemi Co., Ltd.

Note 5: The investment loss recognized by the Company for the year ended December 31, 2022 included the adjustment of unrealized investing gain and losses.

GCS HOLDINGS, INC. AND SUBSIDIARIES

Major shareholders information

December 31, 2022

Table 12

Name of major shareholders	Shares	
	Number of shares	Ownership (%)
ENNOSTAR INC.	9,028,000	8.14%
Harvestar Investment Corp.	9,013,000	8.13%
Calystar Investment Corp.	6,500,000	5.86%

Note: (1)The main shareholder information using total number of ordinary shares and preferred shares held by the shareholders who have completed the company's non-physical registration and delivery (including treasury shares) is more than 5% on the last business day at the end of each quarter. As for the share capital recorded in the company's financial report and the number of shares which the company actually have completed the non-physical registration and delivery, may be different from computational basis.

(2)Above information if belong to shareholders deliver the shares to the trust, will be disclosed by the principal individual account of trustee opened the trust account. As for shareholders who handle the declaration of insider equity holding more than 10% of their shares in accordance with the Securities and Exchange Act, their shareholdings include their shareholdings plus their delivery of trust and shares with the right to make decisions on trust property, etc. Please refer to the information at the website of the Taiwan Stock Exchange for insider equity declaration information.

(3)The preparation principle of this table is to calculate the distribution of the balance of each credit transaction based on the shareholders registered on the book-close day of the extraordinary shareholders' meeting (short-sale securities are not purchased back).

(4)Ownership (%) = The total number of shares held by this shareholder / The total number of shares that have been delivered without physical registration.

(5)The total number of shares that have been delivered without physical registration (including treasury stocks) are 110,825,067 = 110,825,067 (common shares) + 0 (preferred shares).



**Representative: Ta-Lun (Darren) Huang**

