

Stock Code: 4991

# GCS Holdings, Inc.

# 2024 Annual Report

Publication date: April 7, 2025 Annual report inquiry website: http://mops.twse.com.tw/ http://www.gcsincorp.com/ I. Spokesperson, acting spokesperson, and litigation and non-litigation representative in Taiwan:

Spokesperson: Yu, You-Chong Title: Senior VP of Sales Tel.: (886) 2-8226-1185 E-mail: syu@gcsincorp.com Acting spokesperson: Lin, Shu-Wei Title: Assistance of the President

Tel.: (886) 2-8226-1185 E-mail: klin@gcsincorp.com

Litigation and non-litigation representative: Huang, Ta-Lun

Title: Chairman

Tel.: (886) 2-8798-6922 E-mail: dhuang@gcsincorp.com

#### II. Board Director List

	51 <b>2</b> 15 <b>7</b>			
Title	Name	Title	Name	Nationality of independent director
Chairmai	Huang, Ta-Lun	Independent	Tseng,	R.O.C.
		Director	Tsung-Lin	
Director	Unikorn Semiconductor Corporation	Independent	Chao, Mei-	R.O.C.
	Representative: Ann, Bau- Hsing)	Director	Chun	
Director	Unikorn Semiconductor Corporation	Independent	Lin, Shang-	R.O.C.
	Representative: Su, Feng-Cheng)	Director	Yi	
Director	Unikorn Semiconductor Corporation			
	Representative: Lee, Tsun Chung)			

Please refer to pages 6-8 of this annual report for the main experiences of each director.

#### III. Address and telephone number of the Company

GCS Holdings, Inc.

Registered address: One Nexus Way, Camana Bay, Grand Cayman, KY1-9005, Cayman Islands

Tel.: (1) 310-5307274

Operational head office: Global Communication Semiconductors, LLC. 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: 7F-5, No. 738, Zhongzheng Rd., Zhonghe Dist., New Taipei City

Tel.: (886)2-8228-0488

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. Liu, Chien-Yu 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/

# Contents

	Page
One. Letter to Shareholders	4
Two. Corporate Governance Report	6
I. Information on Directors, President, Vice Presidents, Junior VPs, and officers of departments and branches	6
II. Remuneration for Directors, Supervisors, President, and Vice Presidents in the most recent year	15
III. Implementation of corporate governance	19
IV. Independent auditor's auditing fees	43
V. Information on the replacement of CPAs	43
VI. 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	45
VII. Equity transfer and changes in equity pledge of directors, supervisors, managerial officers, and shareholders who have more than 10% shareholdings	45
VIII. Information on the top ten shareholders who are related to each other or as spouses or relatives within the second degree of kinship	46
IX. The number of shares held by the company, the company's directors, supervisors, managerial officers, and enterprises directly or indirectly controlled by the company in the same reinvested enterprise, and combined to calculate the comprehensive shareholding ratio	48
Three. Capital overview	50
I. Capital and shares	50
II. Disclosure of corporate bonds	56
III. Disclosure of preferred stocks	56
IV. Disclosure of Global Depositary Receipts (GDR)	57
V. Disclosure of employee stock warrants	58
VI. Disclosure of new restricted employee shares	64
VII. Issuance of new shares in connection with the merger and acquisition of shares of other companies	70
VIII. Disclosure on the use of funds	70
Four. Operation Overview	73
I. Business activities	73
II. Market, production, and sales overview	94
III. Number of employees, average years of service, average age, and distribution ratio of educational background in the last two years	107
IV. Information on environmental protection expenditure	107
V. Labor relations	107
VI. Information security management	108
VII. Important contracts	110
Five. Review and analysis of the financial status and financial performance and risks	112
I. Financial status	112
II. Financial performance	113
III. Cash flow	114

	Page
IV. The impact of significant capital expenditures on the financial operation in the	115
most recent year	
V. Reinvestment policy in the most recent year, the main reasons for investment profit	116
or loss, improvement plan, and investment plan for the next year:	
VI. Risk management and evaluation	117
VII. Other important matters	127
Six. Special disclosures	128
I. Information on affiliates	128
II. Private placement of marketable securities	133
III. Other supplementary information	134
IV. Occurrence of the matters listed in Article 36, Paragraph 3, Subparagraph 2 of the	143
Securities and Exchange Act that affect shareholders' equity or security price in the	
most recent year or as of the annual report publication date	

#### One. Letter to Shareholders

#### **Dear shareholders:**

The 2024 consolidated revenue for GCS Holdings, Inc. was up by approximately 29.57%, compared with that of 2023. In view of the product array, the 2024 sales revenue in RF wafer foundry was down approximately 24%, since the market demand not yet recovered and the decreased customer demand resulting in reduced production. With regards to the optoelectronic wafer foundry, the 2024 revenue was down approximately 25% compared with that of 2024. The sales revenue for GCS's own-brand component (KGD) was up approximately 95%, mainly due to the continuous demand for artificial intelligence (AI) and data center high-speed transmission, which drove the demand for application of data center products and sales to increase.

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 6inch wafer foundry capacity through the joint venture. Such strategies aimed to cope with the changes in international trade situations, provide customers with options for the place of production in different regions, and thereby expand its operational scale and strengthen the corporate competitiveness. In particular, GCS Holdings Inc. and its investee company, Unikorn Semiconductor Corporation (Unikorn) reached an agreement, due to the adjustment of direction in future operational development, whereas, GCS Holdings, Inc. sold all Unikorn equity held to Epistar Corporation in August, 2024, and recognized the related gains on disposal of investments. Moreover, GCS started investing in ChangZhou ChemSemi Co., Ltd. (ChangZhou ChemSemi) in May 2020. As of the end of 2024, the shareholding ratio of investment in ChangZhou ChemSemi was 20.69%. ChangZhou ChemSemi is based on the wafer foundry business for consumer electronics products, which completed all foundry expansion last year. To cope with output expansion and demand for new foundry, the company purchased machinery equipment and increased manpower, which resulted in a substantial increase in the relevant production costs and expenses. Although the sales revenue of the company substantially increased, compared with last year, 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 is to expand the production and sales of optoelectronic components. As of the end of 2024, 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, GCS will continue to develop high-margin processes such as GaN and next-generation BAW Filters for applications in base station infrastructure, aerospace and defense industries, in addition to establishing cooperations with customers and acquiring orders by mass production through certifications. With regards to optoelectronic wafer foundry, GCS will constantly develop projects in PIC (Photonic Integrated Circuit), VCSEL, and GaAs LD to strive for mass-production orders. In terms of own-brand KGD, GCS will continue to develop high-margin optical communication products and applications at high speed, in order to expand the market scale and increase the source of customers. Such optical communication products include 200G PD and related transmitter components, which can meet the customer demand of data center for 100G to 1.6T or higher speed of fiber optic transceiver module.

With regards to finance, the GCS 2024 consolidated net operating revenue was TWD1,750,044 thousand, up 29.57%, compared with TWD1,350,604 thousand in 2023. The 2024

gross profit was TWD663,008 thousand, up 179.44%, compared with TWD237,259 thousand in 2023. The 2024 operating gain was TWD 192,774 thousand, up 184.91%, compared with operating loss of TWD227,027 thousand in 2023. The 2024 net loss attributed to the parent company was TWD236,986 thousand and the 2023 net loss attributed to the parent company was TWD 792,236 thousand, down approximately 70%. The 2024 loss per share was TWD 2.13 and the 2023 loss per share was TWD 7.18.

Overall, under the influence of factors such as disinflation, robust demand for artificial intelligence (AI) related industries, and geopolitics in 2024, the global economy gradually recovered. In spite of the continuous geopolitical tensions and gradual expansion of protectionism, the global macroeconomic environment faces higher uncertainty than ever. Nonetheless, the recovery of demand for electronics-related products, and the rising demand for expansion in artificial intelligence (AI) and other emerging technology applications will likely become the future drivers of growth. Although GCS still encounters losses in operation currently, the Company still constantly develops new products and boosts processing technology to improve the quality, yield rate, and production efficiency in order to control proper costs and expenditures. GCS also expands its sources of customers and boosts profits as the objectives. Moreover, GCS aims to improve its operational efficiency, adjust investment structure to reduce he losses incurred during reinvestment, and thereby increase the operating profits of the Company and shareholder interests ultimately.

Chairman: Huang, Ta-Lun

大黄

Chief Executive Officer: Ann, Bau-Hsing

實安

Accounting Officer: Chang, Chih-Yu



# **Two. Corporate Governance Report**

- I. Information on Directors, Supervisors, Presidents, Vice Presidents, Junior VPs, and officers of departments as
  - (I) Directors and Supervisors (The Company does not have supervisors)
  - 1. Director information

Job Title	Name	Natio nality or place of	Gend er & age	First-term elected date	Elected date	Term of office (Years	Owned			Existing Number of Shares Owned (Note 1)		Current Number of Shares Owned by Spouse or Minor Children (Note 1)		r of shares the name of (Note 1)	Main education (experience)
		registr ation	(Note 5)	date		( Years	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)	
Chairman	Huang, Ta-Lun (Note 3)	ROC	Male	11/30/2010	6/6/2023	3	-	-	-	-	2,920,886	2.57%	-	-	MBA, University of Michigan, Ann Ar Partner of Asia Vest Partners, TCW/YF
	Unikorn Semi- conductor Corp. (Note 3)	ROC	-	7/2/2021	6/6/2023	3	20,000	0.02%	20,000	0.02%	(NA)	(NA)	-	-	None
Director	Ann, Bau-Hsing (Note 3)	ROC	Male	11/15/2012	6/6/2023	3	-	-	-	-	392,007	0.35%	-	-	MBA, Rutgers, The State University of Jersey Master of Engineering, Ohio State Univ VP of Hotung International Company KTB Investment Partner and Exe- Director of KTB Investments VP of Pegatron Corporation
	Unikorn Semi- conductor Corp. (Note 3)	ROC	-	7/2/2021	6/6/2023	3	20,000	0.02%	20,000	0.02%	(NA)	(NA)	-	-	None
Director	Feng-Cheng Su (Note 4)	ROC	Male	12/25/2023	12/25/2023	3	-	-	-	-	-	-	-	-	Chairman, Lextar Electronics Corp. Senior VP, AU Optronics Corp Ph.D., Materials Science and Engineering, State University of New York, Stony Broo
Director	Unikorn Semi- conductor Corp.	ROC	-	7/2/2021	6/6/2023	3	20,000	0.02%	20,000	0.02%	(NA)	(NA)	-	-	None

Job Title Name		Natio nality or place of	Gend er & age (Note	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)			l-Degr e Serv	ving as a Director,
		registr ation	5)			)	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)				Name	Relation
	Tsun-Chung Lee (Note 4)	ROC	Male	12/25/2023	12/25/2023	3 3	-	-	-	-	-	-	-	-	VP of the Lextar Electronics Corp. CSO and COO of NICHE-TECH GROUP LIMITED Strategy Consultant at McKinsey & Company MBA, UC Berkeley	Vice President of Ennostar Inc. Representative of Corporate Director of ProLight Opto Technology Corporation, Amengine Corporation, Trendylite Corporation, Domi-Star Optoelectronics Corporation, Tyntek Corporation, Bridgelux Optoelectronics (Xiamen) Co., Ltd., LEADSTAR Micro-Crystal Display Corporation (JiangSu) Ltd., iReach Corporation, Epistar Vision Optoelectronics Corporation Director of Beijing Zhongke Epistar Materials Co., Ltd., and Changzhou Chemsemi Co., Ltd.,	-	-	-
	Tseng, Tsung- Lin (Note 3)	ROC	Male	11/15/2012	6/6/2023	3	-	-	-	-	-	-	-	-		Director of XAC Automation Corp. Independent Director of Groundhog Technologies Inc.	-	-	-
Independent Director	Chao, Mei- Chun(Note 3)	ROC	Femal e	6/6/2023	6/6/2023	3	-	-	-	-	-	-	ı	-	Member of Taiwan & New York Bar Master of Laws, National Taiwan University & Columbia University Partner, Jones Day President, International Federation of Women Lawyers Executive Director & Chair of Lawyer Ethics Committee, Taiwan Bar Association Member of the Attorney Disciplinary Appeal Review Committee Asia Regional Vice President, International Federation of Women Lawyers	Partner-in-Charge, Marianne Chao Law Office Independent Director of TECO Electric & Machinery Co., Ltd.	-	-	-
Independent Director	Lin, Shang-Yi (Note 3)	ROC	Male	6/6/2023	6/6/2023	3	-	-	-	-	-	-	-	-	Master of Economics and Master of Business Administration, Illinois State University at Urbana-Champaign Master of Mechanical Engineering, Tatung Institute of Technology Director of Procurement, Fujian Jinhua Integrated Circuit Co., Ltd.	-	-	-	-

Job Title	Name	or place	Gend er & age (Note	First-term elected	Elected date	Term of office (Years		When	Existing of Share (No	Number s Owned te 1)	Current N Shares O Spouse o Children	r Minor	held in	of shares the name of (Note 1)	Main education (experience)	Currently holding positions in the Company and		Whose Spouse Second-Degree Relative Serving a Head, Board Director supervisor		
		registr ation		date		)	Number of Shares (shares)	Shareholding ratio	Number of Shares (shares)	Shareholding ratio (Note 2)	Number of Shares (shares)	Shareholding ratio (Note 2)	Shares	Shareholding ratio (Note 2)			Title	Name	Relation	
															Site Procurement Manager at Micron Technology Taiwan, Inc. Deputy Director of Materials Management, Rexchip Corporation Project Manager, Procurement Department, Powerchip Semiconductor Corporation					

Note 1: It refers to the shareholdings as of the annual report publication date (April 7, 2025). Note 2: It is calculated based on the total issuance of 113,579,251 shares.

Note 3: Elected on June 6, 2023 for a term of office from June 6, 2023 to June 5, 2026.

Note 4: Appointed on December 25, 2023, due to the reassignment of the corporate representative director.

Note 5: Please refer to page 11 of this annual report for information on the age of directors.

### 2. Major shareholders of corporate shareholders

The name of co	orporate	Major shareholders of corporate shareholders	Shareholding
shareholders			ratio
Unikorn	Semiconductor	Epistar Corporation	100%
Corporation		Epistai Corporation	

Note: The record date for shareholding in the table above is based on the shareholder register as recorded on September 3, 2024, by Unikorn Semiconductor Corporation.

3. The major shareholders of the major shareholder in the table above are corporate:

Name of corporation	Major shareholder of corporation	Shareholding
Traine of corporation	iviagor sharehorder of corporation	ratio
Epistar Corporation	Ennostar Inc.	100%

Note: The record date for shareholding in the table above is based on the shareholder register as recorded on March 31, 2025, by Epistar Corporation.

- 4. 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:

Title / Name	Conditions		Professional qualifications and experience		Independence	Number of publicly listed company that he/she serves as an Independent Director
Chairman	Huang, Ta- Lun		Please refer to pages 6-8 of this annual		NA	1
Director	Ann, Bau- Hsing (Note 1)	ro p	report for the professional qualifications and			0
Director	Su, Feng- Cheng (Note 1)	d	experience of directors.  All of the directors are			0
Director	Lee, Tsun- Chung (Note 1)	c A	ree of any of the conditions specified in Article 30 of the			0
Independent Director	Tseng, Tsung-Lin		Company Act (Note l).	All 1.	independent directors meet the following conditions: Comply with Article 14-2 of the Securities and Exchange Act	1
Independent Director					and the relevant provisions of the "Regulations Governing Appointment of Independent Directors and Compliance	1
Independent Director	Lin,Shang- Yi			2.	Matters for Public Companies" (Note 2). The Company's shares are not held by the principal and the principal's spouse and minor children. There had been no amount of remuneration received for	0
					providing business, legal, financial, accounting, and other services to the Company or the Company's affiliated enterprises in the last two years.	

Note 1: The legal representative of Unikorn Semiconductor Corp.

Note 2: 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 vet:
- (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 3: 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 Compensation 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 4: 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
At least one director of each gender	Achieved
More than half of the independent directors shall not serve for more than three consecutive terms	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			Person	al profile				Profession	al ability	
		Nationality	Sex	Serving as an employ ee too	Aş 51-60	ge 61-70	Term of office for independent director (not more than 3 terms consecutively)	Legal, accounting, or finance profession	Business managemen t ability	Industry experience	Science and technology profession
Huang, Ta-Lun	Chairman		Male	V		V		V	V	V	V
Ann, Bau- Hsing (Note)	Director		Male	V		V		V	V	V	V
Su, Feng- Cheng (Note)	Director		Male			V	NA		V	V	V
Lee, Tsun- Chung (Note)	Director	ROC	Male		V				V	V	V
Tseng, Tsung- Lin	Independent Director		Male			V		V	V	V	
Chao,Mei -Chun	Independent Director		Female		V		V	V	V	V	
Lin,Shang -Yi	Independent Director		Male		V		V		V	V	V

Note: The legal representative of Unikorn Semiconductor Corp.

### 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 account 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. Two of the independent directors has not served for 3 consecutive terms accounts for 67% of the board independent directors.
- 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.

- C. The board of directors does not meet the one-third gender representation requirement. Reasons and future plans are as follows:
  - a. The current composition of the board is primarily based on the accumulation of professional expertise, industry experience, and seniority over time, with gender ratio not being a major consideration.
  - b. Most board members are required to have specialized knowledge and experience in specific fields, where the proportion of female talent is relatively low.
  - c. The company will actively promote gender diversity policies and incorporate gender ratio considerations in future board elections to ensure compliance with the gender balance objectives set by regulatory authorities.
  - d. The company plans to introduce more candidates with relevant professional backgrounds who meet gender balance objectives. During board re-elections or when adding board seats, priority will be given to individuals who contribute to gender diversity, with the goal of gradually achieving the target of at least one-third of board seats being held by either gender.

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

April 7, 2025

					Numb Shares (	Owned e 1)	Number of Owned by and Mino (Note	Spouse r Child	shares the na	ber of held in ame of (Note 1)		Ma Spe	nager Wouse or econd-d	Tho is a has the legree
Title	Nationality	Name	Gender	Service date	Number of shares (shares)	ratio	Number of shares	Shareho lding ratio	Numb er of shares	Shareh olding ratio	Experience and Education Background Concurrent Job Title Held in Other companies	Title	Name	Relation
Chairman and Head of Strategic Development Office	ROC	Huang, Ta-Lun	Male	8/1/2015	-	-	2,920,886	2.57%	-	-	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 Shanghai Galasemi Co., Ltd. Independent Director of SYSTEX Corporation	-	-	-
Chief Executive Officer & President	ROC	Ann, Bau- Hsing	Male	3/1/2012	-	-	392,007	0.35%	-	-	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  Chief Executive Officer and President of the Company Director of D-Tech Optoelectronics, Inc. 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	301	0.00%	-	-	-	-	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	199,136	0.18%	-	-	-	-	Master of Materials Department, National Chiao Tung University Foundry Manager of HEXAWAVE INC. Engineering Manager of WIN SEMICONDUCTORS CORP.	-	-	-
Senior VP of Optoelectronic Products of Business Unit	ROC	Yu, Yeou- Chong	Male	10/1/2004	214,392	0.19%	-	-	-	-	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.	-	-	-

					Numb Shares (	Owned	Number of Owned by and Mino (Note	Spouse r Child	shares the na	ber of held in me of Note 1)			Spe	ouse or	Who is a has the degree hip
Title	Nationality	Name	Gender	Service date	Number of shares (shares)		Number of shares	Shareho Iding ratio	Numb er of shares	Shareh olding ratio	Experience and Education Background	Concurrent Job Title Held in Other companies	Title	Name	Relation
Finance and Accounting Officer	ROC	Chang, Chih- Yu	Female	8/23/2024	13,708	0.01%	-	-	-		Master of Business Administration, Georgetown University Senior Accountant, Yamaha Motor Finance USA	-	-	-	-
Senior VP of Optoelectronic Devices, R&D Unit	ROC	Wang, Samuel	Male	7/15/2000	115,598	0.10%	-	-	-	-	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	489,316	0.43%	-	-	-	-	Master of Engineering, University of Southern California Planning manager of Raytheon Systems, Co.	-	-	-	-
Corporate Governance Officer	ROC	Lin, Shu- Wei	Female	2/20/2023	22,712	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 7, 2025). Note 2: It is calculated based on the total issuance of 113,579,251 shares. Note 3: As of the annual report publication date, the person mentioned is currently in service.

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

(I) Remuneration of directors and independent directors

Unit: NT\$ Thousands; %

																					0.	III. IVI # IIIOusunus, 70
				Dire	ector's R	emunerat	ion			Ratio	of the total		Rem	uneratio	n to part-	time ei	nploye	es			of the total	
Title	Name	Remun		Pensio	on (B)	Direct remun (C) (N	eration	exec	iness eution ase (D)	C+D)	nt (A+ B+ to the net me (loss)	s	ry, bonus, pecial enses, etc. (E)	Pensi	on (F)	Emp	loyee r (	emune G)	eration	C+D+I the ne	E+F+G) to et income loss)	Remuneration received from reinvested business other than the subsidiaries or parent
		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 Compan y	All companies in the financial report	The Company	All companies in the financial report	Cash	Stock amount	financ Cash	sanies in the ial report  Stock amount	The Company	All companies in the financial report	company
Chairman	Huang, Ta- Lun	-	\$660	-	-	-	-	-	\$60	-	\$720 (-0.30%)	-	\$2,408	ı	-	-	-	-	-	-	\$3,128 (-1.32%)	None
Corporate Director	Unikorn Semiconductor Corp.	-	\$1,200	-	-	-	-	-	-	-	\$1,200 (-0.51%)	-	-	-	-	-	-	-	-	-	\$1,200 (-0.51%)	None
Director	Representative of Unikorn: Ann, Bau- Hsing	-	\$600	-	-	-	-	-	\$60	-	\$660 (-0.28%)	-	\$16,113	-	\$443	-	-	-	-	-	\$17,216 (-7.26%)	None
Director	Representative of Unikorn: Su, Feng- Cheng	-	-	-	-	-	-	-	\$50	-	\$50 (-0.02%)	-	-	-	-	-	-	-	-	-	\$50 (-0.02%)	\$181
Director	Representative of Unikorn: Lee, Tsun- Chung	-	-	-	-	-	-	-	\$50	-	\$50 (-0.02%)	-	-	-	-	-	-	-	-	-	\$50 (-0.02%)	\$181
Director	Representative of Unikorn: Lee, Biing-Jye (Note 2)	-	-	-	-	-	-	-	\$10	-	\$10 (0.00%)	-	-	-	-	-	-	-	-	-	\$10 (0.00%)	None
Director	Representative of Unikorn: Shih, Wei (Note 2)	-	-	-	-	-	-	-	\$10	-	\$10 (0.00%)	-	-	-	-	-	-	-	-	-	\$10 (0.00%)	None
Independent Director	Lin,Shang-Yi	-	\$600		-	-	-	-	\$130	-	\$730 (-0.31%)	-	-	-	-	-	-	-	-	-	\$730 (-0.31%)	None
Independent Director	Chao,Mei- Chun	-	\$600	-	-	-	-	-	\$130	-	\$730 (-0.31%)	-	-	-	-	-	-	-	-	-	\$730 (-0.31%)	None
Independent Director	Tseng, Tsung- Lin	-	\$660	-	-	-	-	-	\$130	-	\$790 (-0.33%)	-	-	-	-	-	-	-	-	-	\$790 (-0.33%)	None

<sup>(</sup>Note 1): The Company suffered a net loss before tax in 2024; therefore, director remuneration was not appropriated in accordance with the Company's articles of incorporation.

<sup>(</sup>Note 2): New members were elected at the shareholders' meeting on June 6, 2023. Due to the corporate director reassigning its representative, the director was relieved of duties on December 25, 2023

<sup>(</sup>Note 3): 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.

<sup>(</sup>Note 4): 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

<sup>(</sup>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

			ry (A) ote 3)	Pensi	on (B)	Bonuses expenses		Emp	-	emunerat (ote 2)	ion (D)	amount C+D) to	the total (A+ B+ the net e (loss)	Remuneration received from reinvested business other than the subsidiaries or parent
Title	Name (Note 1)	The Compa ny	All companies in the financial report (Note 3)	The Company	All companies in the financial report	The Company	All companies in the financial report	1	he npany Stock amount		panies in nancial port Stock amount	The Company	All companies in the financial report	company
Chief Executive Officer & President	Ann, Bau-Hsing (Note 4)	-	\$12,770	-	\$443	-	\$3,343	-	-	-	-	-	\$16,556 (-6.99%)	None
VP of R&D Unit	Wang, Samuel (Note 4)	-	\$6,874	-	\$250	-	\$7,064	-	-	-	-	-	\$14,188 (-5.99%)	None
Senior VP of Sales	Yau, Wing (Note 4)	-	\$8,421	-	\$379	-	\$4,495	-	-	-	-	-	\$13,296 (-5.61%)	None
Senior VP of R&D Unit	Wang, Shing-Kuo (Note 4)	-	\$9,261	-	\$340	-	-	-	-	-	-	-	\$9,600 (-4.05%)	None
Senior VP of Sales	Yu, Yeou-Chong (Note 4)	-	\$8,257	-	\$302	-	-	-	-	-	-	-	\$8,559 (-3.61%)	None
Senior VP of Operating Unit	Chen, Minkar													None
Finance and Accounting Officer	Chang, Chih-Yu												¢17.007	
Chairman and Head of Strategic Development Office	Huang, Ta-Lun	-	\$17,351	-	\$556	-	-	-	-	-	-	-	\$17,907 (-7.56%)	
Corporate Governance Officer	Lin, Shu-Wei	d. C.		1 . 66	£41									

Note 1: The information on the remuneration of the Company's managerial officers as of the end of 2024 is filled in the table.

Note 2: The Company's board of directors resolved not to distribute remuneration to employees on February 18, 2025.

Note 3: It included salary expenses of NT\$4,333 thousand 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		Name of President and Vice President
and Vice President of the Company	The Company	All companies in the financial report
Less than NT\$1,000,000	1	-
NT\$1,000,000 (inclusive)~NT\$2,000,000 (non-inclusive)	-	-
NT\$2,000,000 (inclusive)~NT\$3,500,000 (non-inclusive)	-	Huang, Ta-Lun and Lin, Shu-Wei
NT\$3,500,000 (inclusive)~NT\$5,000,000 (non-inclusive)	-	Chang, Chih-Yu
NT\$5,000,000 (inclusive)~NT\$10,000,000 (non-inclusive)	-	Wang, Shing-Kuo, Yu, Yeou-Chong, and Chen, Minkar
NT\$10,000,000 (inclusive)~NT\$15,000,000 (non-inclusive)	-	Ann, Bau-Hsing, Wang, Samuel and Yau, Wing
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	-	9 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

-				+		
T4	20	23	2024			
Item	Amount	%	Amount	%		
Director						
President & Vice	\$76,564	(10)	\$85,057	(36)		
President						
Net loss	(\$792,236)	100	(\$236,986)	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 Compensation 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 Compensation Committee and the resolutions of the Board of Directors.

## III. Implementation of corporate governance

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

The Board of Directors had held 6 meetings (A) in 2024 with the attendance of directors illustrated as follows:

Name	Number of meetings(A)	Frequency of attendance (B)	Frequency of attendance by proxy	Actual attendance rate (%) (B/A) (Note)	Remarks
Huang, Ta-Lun	6	6	0	100%	
Representative of Unikorn: Ann, Bau-Hsing	6	6	0	100%	
Representative of Unikorn: Su, Feng-Cheng	6	6	0	100%	
Representative of Unikorn: Lee, Tsun-Chung	6	6	0	100%	
Tseng, Tsung-Lin	6	6	0	100%	
Chao, Mei-Chun	6	6	0	100%	
Lin, Shang-Yi	6	6	0	100%	
	Huang, Ta-Lun Representative of Unikorn: Ann, Bau-Hsing Representative of Unikorn: Su, Feng-Cheng Representative of Unikorn: Lee, Tsun-Chung Tseng, Tsung-Lin Chao, Mei-Chun	Name meetings(A)  Huang, Ta-Lun 6  Representative of Unikorn: 6  Ann, Bau-Hsing  Representative of Unikorn: 6  Su, Feng-Cheng  Representative of Unikorn: 6  Lee, Tsun-Chung  Tseng, Tsung-Lin 6  Chao, Mei-Chun 6	Huang, Ta-Lun 6 6 Representative of Unikorn: 6 6 Ann, Bau-Hsing Representative of Unikorn: 6 6 Su, Feng-Cheng Representative of Unikorn: 6 6 Chao, Mei-Chun 6 6	Name    Number of meetings(A)	Name

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. 21-24) 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 participation in voting of the director who has a conflict of interest in the proposal concerned must be detailed:

Board	Name of	Proposal content	Reasons for recusal, and the participation
meeting date		1 Toposai content	in voting of the director
Feburary 20, 2024	Ann, Bau-Hsing	Review and Adoption of 2023 Executives' Bonus and 2024 Salary	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.
April 26, 2024	Ann, Bau-Hsing Lee, Tsun- Chung Su, Feng-Cheng	Adoption and Approval of Sale of Shares of Unikorn Semiconductor Corporaiotn to Epistar Corporation	3 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 4 directors present who did not have a conflict of interest.
April 26, 2024	Ann, Bau-Hsing Lee, Tsun- Chung Su, Feng-Cheng	Adoption and Approval of Purchase of Equipment from Unikorn Semiconductor Corporaiotn by Global Communication Semiconductors, LLC	3 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 4 directors present who did not have a conflict of interest.
August 6, 2024	Ann, Bau-Hsing Lee, Tsun- Chung Su, Feng-Cheng	Adoption and Approval of Adjustment of the Proposal to Purchase Equipment from Unikorn Semiconductor Corporation by Global	3 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 4 directors present who did not have a conflict of interest.

			Communication	
			Semiconductors, LLC	
			adopted in 2024 AGM	
August 2024	6,	Ann, Bau-Hsing	Adoption and	3 director (including 0 director by proxy) was recused due to a conflict of interest in
2024		Lee, Tsun-	Approval of	
		Chung	Equipment	this proposal without participating in the
		Su, Feng-Cheng	Additionally	discussion and voting. The proposal was
			Purchased from	resolved by the 4 directors present who did
			Unikorn	not have a conflict of interest.
			Semiconductor	
			Corporation by Global	
			Communication	
			Semiconductors, LLC	

III. The performance evaluation of the Company's Board of Directors: The 2024 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 18, 2025.

Evaluation	Evaluation	Evaluation	Evaluation	Evaluation contents
cycle	period	scope	approach	
Once a year	1/1/2024 ~	Board of	Internal	1. This evaluation includes five aspects (A.
	12/31/2024	Directors	evaluation	Participation in the company's operations,
			of the Board	B. Improvement of the quality of the board
			of Directors	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. 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.
				2. 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 comply with regulatory
				requirements.
				3. It is recommended that the supplementary
				information related to board meeting
				proposals be provided earlier to allow

					directors more time to review and understand the content.
	Once a year	1/1/2024 ~	Each board	Self-	This evaluation includes six aspects (A.
		12/31/2024	director	evaluation	Alignment of the goals and missions of the
				of each	company, B. Awareness of the duties of a
				board	director, C. Participation in the operation of
				director	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.
					The average score in each aspect of the
					evaluation is between 4.81 and 5, 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.

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 Compensation 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.

✓: Attended in person **O**:Attended by proxy **x**:Absence

2024	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>
Tseng, Tsung-Lin	✓	✓	✓	✓	✓	✓
Chao, Mei-Chun	✓	✓	✓	✓	✓	✓
Lin, Shang-Yi	✓	✓	✓	✓	✓	✓

#### 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 meetings attended by the resigned director.
- (2) If there is a director re-election convened before the end of the fiscal year, the names 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 meetings attended by the resigned director.

#### (II) Operations of the Audit Committee

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

V. The attendance of independent directors at each board meeting in 2024 is as follows:

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

The following matters were reviewed by the Audit Committee in 2024:

- (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 and competence evaluation
- (9) Appointment and Dismissal of the Chief Internal Auditor

### • Financial report review

The board of directors prepared the Company's 2024 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 was 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

To ensure the independence of the certifying accounting firm, our company has formulated an independence assessment form by referring to Article 47 of the CPA Act and Bulletin No. 10 of the Code of Professional Ethics for Certified Public Accountants, which addresses integrity, impartiality, objectivity, and independence. Additionally, we refer to the Audit Quality Indicators (AQI) guidelines prepared by the accounting firm to evaluate the independence, professionalism, and suitability of the accountants. Every year, we also obtain a declaration of independence from the accountants. Our company reported to the Audit Committee and the Board of Directors on February 20, 2024, and February 18, 2025, respectively, and it was determined that the certifying accountants meet the independence criteria after evaluation.

2. The Company had a total of 5 Audit Committee meetings held in 2024 with the attendance of the independent directors as follows:

Job title	Name	Number of meetings (A)	Actual attendance (B)	Attendance by proxy	Actual attendance ra (%) (B/A)	te Remarks
Convener & Independent Director	Tseng, Tsung-Lin	5	5	0	100%	
Independent Director	Chao, Mei- Chun	5	5	0	100%	
Independent Director	Lin, Shang- Yi	5	5	0	100%	

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 40-43): 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 2024 is as follows:

Date	Nature and Communication Content	Independent directors' recommendations and implementation results
Audit Committee meeting on Feburary 20, 2024	<ol> <li>The 2023Q4 Internal audit report</li> <li>The 2023Q4 Internal audit follow-up report</li> <li>The 2023 Internal Control Statement</li> </ol>	<ol> <li>Independent directors had no comments and no recommendations.</li> <li>Independent directors had no comments and no recommendations.</li> <li>The resolutions were reported to the board of directors.</li> </ol>
Audit Committee meeting on April 30, 2024	The 2024Q1 Internal audit report	Independent directors had no comments and no recommendations.

Audit Committee meeting on August 6, 2024		The 2024Q2 Internal audit report		Independent directors had no comments and no recommendations.
Audit Committee meeting on November 5, 2024	1. 2.	The 2024Q3 Internal audit report The 2025 Audit Plan	<ol> <li>2.</li> </ol>	Independent directors had no comments and no recommendations. The resolutions were reported to the board of directors.

(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 2024 is summarized as follows:

Date	Nature and Communication Content	Independent directors' recommendations and implementation results
Audit Committee meeting on Feburary 20, 2024	<ol> <li>Evaluation of CPA Independence and competency.</li> <li>The 2023 consolidated financial report audit results</li> <li>Matters communicated with the governance unit</li> </ol>	<ol> <li>Independent directors had no comments and no recommendations.</li> <li>The resolutions were reported to the board of directors.</li> <li>Independent directors had no comments and no recommendations.</li> </ol>
Audit Committee meeting on April 30, 2024	<ol> <li>The 2024Q1 consolidated financial report review results</li> <li>Matters communicated with the governance unit</li> </ol>	<ol> <li>The resolutions were reported to the board of directors.</li> <li>Independent directors had no comments and no recommendations.</li> </ol>
Audit Committee meeting on August 6, 2024	<ol> <li>The 2024Q2 consolidated financial report audit results</li> <li>Matters communicated with the governance unit</li> </ol>	<ol> <li>The resolutions were reported to the board of directors.</li> <li>Independent directors had no comments and no recommendations.</li> </ol>
Audit Committee meeting on November 5, 2024	<ol> <li>The 2024Q3 consolidated financial report audit results</li> <li>Matters communicated with the governance unit</li> </ol>	<ol> <li>The resolutions were reported to the board of directors.</li> <li>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

•			Operations	Difference from the
Evaluation Item	YES	No	Summary Description	"Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies" and the reasons
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 Compensation 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."	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
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.	operating procedures are sufficient to help handle shareholders' suggestions, doubts, disputes, and litigation
(II) Does the company have a list of the major shareholders who actually control the company and the ultimate controllers of the major shareholders?			The Company has full knowledge of the shareholdings of directors, managerial officers, and major shareholders.	
(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.	
(IV) Does the company formulate internal regulations to prohibit insiders from using undisclosed information to buy and sell securities?			The Company has formulated the "Operational Procedures for Preventing Insider Trading" to prohibit insiders from using undisclosed information to buy and sell securities.	occurred.
<ul> <li>III. Composition and responsibilities of the Board of Directors</li> <li>(I) Does the board of directors formulate diversity policies, specific management objectives, and have them implemented?</li> </ul>			Please see the notes on pages 9-12 of this annual report.	No significant difference occurred.
(II) Is the company willing to set up other functional committees in addition to the Compensation Committee and the Audit Committee?		V	There is not any functional committee organized by the Company except for the Compensation Committee and the Audit Committee.	

			Operations	Difference from the	
Evaluation Item	YES	No	Summary Description	"Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies" and the reasons	
(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?			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 20-21 of this annual report for the results of the performance evaluation of the Board of Directors in 2024.	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 20, 2024 and February 18, 2025, respectively, in the most recent year and as of the annual report publication date.	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 appointed an appropriate number of competent corporate governance personnel and designated a Chief Corporate Governance Officer. The Chief Corporate Governance Officer is responsible for providing directors with the necessary information for business execution, handling matters related to board and shareholders meetings in accordance with the law, managing company registration and change registration, preparing minutes of board and shareholders meetings, and overseeing other corporate governance-related affairs in compliance with regulations.	occurred.	
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?			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.	occurred.	
VI. Does the company contract a professional stock affairs agency to handle the affairs of the shareholders meeting?  VII. Information disclosures:	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.	occurred.	

Evaluation Item  VES  No  Summary Description  The Company has set up a website to regularly No significant difference information:  (I) Does the company adopt other information disclosure methods (Such as, the company has set up a website to regularly No significant difference occurred.  The Spokesperson system has been implemented, no docurred.  The spokesperson system has been implemented, and the Company's operation information has been disclosure of information, implementation of the spokesperson system, investor conferences, etc.)?  (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 within two months after the end of the fiscal year, and announce and report the financial statements within two months after the end of the fiscal year, and announce and report the financial statements within two months after the end of the fiscal year, and announce and report the financial statements within two months after the end of the first, second, and third quarter since and the operating conditions of each month are announced and reported within the prescribed time limit.  The Company 's apreation information has been disclosed in accordance with the information disclosure regulations; also, an English website has been set up.  The Company's annual financial report, the first, second, and third quarter financial reports and the operating conditions of each month are announced and report the financial statements within two months after the end of the first, second, and third quarter financial report, the first, second, and third quarter financial report, the first, second, and third quarter financial report the first, second, and third quarter financial report in the second and reported within the prescribed time limit.  The Company values the importance of the rights of stakeholders in inquiring about the Company has designated spokespersons and full-time investor relations, stakeholders in inqui				Operations	Difference from the
website to disclose financial business and corporate governance information?  (II) Does the company adopt other of 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.)?  (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?  VIII. Does the company have other V important information that is helpful to understand the operation of corporate governance (including but not limited to employee interests, employee care, investor relations, stakeholders' rights, continuing education of directors and supervisor, the implementation of customer policies, the company's purchase of liability insurance for directors and supervisors, etc.)?  While the company has designated spokespersons and supervisors, etc.)?  While the company has designated spokespersons and full-time investor relations personnel to assist investors, and suppliers and stakeholders. The Company has purchased liability insurance for directors and supervisors, etc.)?  While the company has provided information on training course to directors and supervisors. The Company has provided information on training course to directors and supervisors. The Company has provided information on training course to directors and supervisors and supervisors. The Company has provided information on training course to directors and independent directors.  Advanced study of directors and supervisors: The Company has purchased liability insurance for directors and independent directors.	Evaluation Item	YES	No	Summary Description	Best Practice Principles for TWSE/TPEx Listed
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.)?  (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?  VIII. Does the company have other vimportant information that is helpful to understand the operation of corporate governance (including but not limited to employee interests, employee care, investor 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. The Company has provided information has been disclosed in accordance with the information disclosure regulations; also, an English website has been set up.  V The Company's annual financial report, the first, There should be no second, and third quarter financial reports and the significant difference operating conditions of each month are announced and reported within the prescribed time limit.  The Company values the importance of the rights and interests of employees. Please refer to the "Four Operation Overview" in this annual report for the relevant measures. Investors relations, supplier relations, suppliers and 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 has provided information on training courses to directors and independent directors.  Advanced study of directors and doependent directors.  The Company has provided informat	website to disclose financial business and corporate governance	V		update financial business information and corporate	No significant difference
second, and third quarter financial reports and the operating conditions of each month are announced and report the first, second, and third quarters and the operating conditions of each month are announced and report the first, second, and third quarters and the operating conditions of each month are announced and reported within the prescribed time limit.  The Company values the importance of the rights No significant difference and interests of employees. Please refer to the "Four. Operation Overview" in this annual report for the relevant measures.  Investor relations, supplier relations, stakeholders rights, continuing education of directors and supervisor, the implementation of risk management standards, the implementation of customer policies, the company's purchase of liability insurance for directors and supervisors, etc.)?  The Company values the importance of the rights No significant difference and reported within the prescribed time limit.  The Company values the importance of the rights No significant difference operating conditions of each month are announced and reported within the prescribed time limit.  No significant difference operating conditions of each month are announced and reported within the prescribed time limit.  No significant difference on the rights No significant difference and reported within the prescribed time limit.  No significant difference on the rights No significant difference and reported within the prescribed time limit.  No significant difference on the relations, supplier supp	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	V		and the Company's operation information has been disclosed in accordance with the information disclosure regulations; also, an English website has	
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, 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.)?  and interests of employees. Please refer to the "Four. 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 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.	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		V	second, and third quarter financial reports and the operating conditions of each month are announced	significant difference
	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.)?			and interests of employees. Please refer to the "Four. 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.	occurred.
IX. Please explain the corrective action performed for the corporate governance evaluation results issued by the Corporate	IX. Please explain the corrective ac	ction p	l perfor		issued by the Corporate

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 Compensation Committee or Nomination Committee, if it is available:

1. Information of the Compensation 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 Compensation Committee
Convener & Independent Director	Tsung Lin	Please refer to pages 6-8 of this annual report for information on directors, and pages 9-12 of	this annual report for	1
Independent Director	Chao, Mei-	this annual report for	professional qualifications and independence of independent	0
Independent Director	Lin, Shang-	professional qualifications and the independence of independent directors.	directors.	0

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

## 2. Responsibilities of the Compensation Committee:

The responsibilities of the Company's Compensation 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 Compensation Committee:

- (1) The Company's Compensation Committee is with 3 members on board.
- (2) The term of office of the incumbent (5<sup>th</sup>) members of the Audit Committee: From June 6, 2023 to June 5, 2026, a total of 3 Compensation Committee meetings were held in 2024 with the attendance of the members as follows:

Job Title	Name	Number of meetings (A)	Actual attendance (B)	Attendance by proxy	Actual attendance rate (%) (B/A)	Remarks
Member	Tseng, Tsung-Lin	3	3	0	100%	
Member	Chao, Mei- Chun	3	3	0	100%	
Member	Lin, Shang- Yi	3	3	0	100%	

ther matters to be recorded:										
Compensation Committee	Proposal content and subsequent processing	Resolution	The Company's handling of the opinions of the Compensation Committee							
Feburary 20, 2024	<ol> <li>Passed the resolution of issuing employee stock options and new restricted employee shares to employees.</li> <li>Passed the 2023 remuneration to employees and directors.</li> <li>Passed the 2023 executives Bonus and 2024 Salary proposal.</li> </ol>	Resolved by the committee members unanimously	Deliberated by the board of directors and resolved by the directors present unanimously							
April 30, 2024	Adoption and Approval of the Revision of the Compensation for Board of Directors for the Fifth Term Approved on July 17,2023.	Resolved by the committee members unanimously	Deliberated by the board of directors and resolved by the directors present unanimously							
November 5, 2024	Adoption and Approval of 2024 Employees Stock Option Plan.	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 Compensation Committee, the date, term, proposal content, resolution of the board of directors, and the company's handling of the opinions of the Compensation Committee (such as, the remuneration approved by the board of directors is superior to the recommendation of the Compensation Committee, the differences between them, and reasons should be stated): None
- II. For matters resolved by the Compensation 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 Compensation 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 Compensation Committee meetings convened during the office term of the resigned member and the actual number of Compensation Committee meetings attended by the resigned member.
- (2) If there is a Compensation Committee member re-election convened before the end of the fiscal year, the names 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 Compensation Committee meetings convened during the office term of such member and the actual number of Compensation Committee meetings 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:

			Operations	Difference from the
Evaluation items	Yes	No	Summary Description	"Sustainable Development Best Practice Principles for TWSE/TPEx Listed Companies" and the reasons
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?	:		In 2024, the Company established a dedicated unit for sustainable development, serving as the core organization responsible for advancing the Company's sustainability initiatives. Authorized by the Board of Directors, this unit operates under the leadership of senior management, with department heads participating as supporting members.	
			The unit is tasked with monitoring policy and market developments related to sustainability, formulating and executing annual sustainability plans, and conducting regular reviews of implementation progress.	
			The Board of Directors assumes supervisory responsibility for the Company's sustainability efforts, providing strategic direction and oversight in areas including policy formulation, goal setting, and performance evaluation related to the implementation of sustainability initiatives.	
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)			The Company's management team conducted a review of key processes within their respective areas of responsibility to identify potential risks. The evaluation considered both internal and external factors, leveraging various sources of information such as historical data, theoretical analysis, technical expertise, and stakeholder concerns. Each identified risk was assessed based on the potential impact it could have on the Company upon occurrence.	
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.	
(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.	
(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.	
(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,		V	The operating entity of the company, Global Communication Semiconductors LLC (hereinafter referred to as GCS USA) in the United States, conducts relevant statistics and monitoring of greenhouse gas emissions, water consumption, and total waste weight in accordance with local regulations. GCS USA has	revise relevant management policies as required and continuously monitor

			Operations	Difference from the
Evaluation items	Yes	No	Summary Description	"Sustainable Development Best Practice Principles for TWSE/TPEx Listed Companies" and the reasons
water consumption reduction, or other waste management policies?			established a waste disposal plan to manage the disposal of waste generated during various manufacturing processes. In the year 2024, GCS USA generated 52.19 tons of hazardous waste and 58.97 tons of non-hazardous waste. GCS USA has also established an air quality management plan to monitor and reduce greenhouse gas emissions, with direct greenhouse gas emissions totaling 7,602.9940 tons and indirect greenhouse gas emissions totaling 1,493.7342 tons in the year 2024. Additionally, GCS USA has implemented a water quality management plan to manage wastewater treatment and discharge, with total water consumption in 2024 amounting to approximately 7.6162 trillion liters. Bsides setting up relevant management policies, GCS USA also regularly educates employees about energy-saving and carbon-reduction policies and handles waste in accordance with legal requirements. Furthermore, the relevant departments of the company closely monitor and comply with government environmental protection policies and regulations.	and total waste weight.
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.	
(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 107-108 of this annual report for details. The Company has also formulated employee remuneration distribution regulations in the Company's articles of incorporation.	
(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.	
(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.	

			Operations	Difference from the		
				"Sustainable		
				Development Best		
Evaluation items	Yes	No	Summary Description	Practice Principles for		
				TWSE/TPEx Listed		
				Companies" and the reasons		
(VI) Has the company formulated a		V	The Company will evaluate whether the supplier			
supplier management policy, requiring		v	has a record of damaging the environment and			
suppliers to follow relevant codes on			society before initiating any business transaction,			
issues related to environmental			and will avoid doing businesses with those who			
protection, occupational safety and			violate the corporate social responsibility policy.			
health, or labor rights, and their			The Company when signing or renewing			
implementation?			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			
V D 4	17		society.	The Commence 2024		
V. Does the company refer to the internationally accepted reporting standards			The Company's 2024 Sustainable Development Report is still in preparation, and the Company			
or guidelines to prepare the sustainability			will continue to observe relevant regulations and			
reports that disclose non-financial			handle them in compliance with the requirements			
information of the company? Has the			in the future.	the Company will		
aforementioned report received a				continue to observe		
confirmation or guarantee opinion from a				relevant regulations and		
third-party verification unit?				handle them in		
				compliance with the		
				requirements in the		
				future.		
			relopment Best Practice Principles" in accordance			
Development Best Practice Principles for TWSE/TPEx Listed Companies," please describe the operation and its difference from						

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 code, 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) Implementation of climate-related information

Items	Operations									
1. Describe the	Operations  In response to the high uncertainty of climate and the regid changes in policies and markets our									
board of	In response to the high uncertainty of climate and the rapid changes in policies and markets, our company will convene senior executives from various departments on an irregular basis to identify									
directors and					we further assess the potential					
management's					operational sites. This enable					
oversight and					ynamics more comprehensive					
						iy, anowing for a				
governance of climate-related	more nonstic c	onsideration	in our overall operation	mai sira	negy planning.					
risks and										
opportunities.	0	·	. 1 1	1	1 ( 1 1 6 1 1 1					
2. Describe how	Our company is actively developing solutions to reduce the operational and financial impacts of climate									
the identified	change and enhance organizational climate resilience. We define short-term as within 3 years, mid-term									
climate risks	as 3 to 5 years, and long-term as over 5 years. We assess the potential operational and financial impacts of related climate risks and opportunities on the company to plan various actions in response to these									
and				ompany	to plan various actions in res	ponse to these				
opportunities	climate-related risks and opportunities.									
impact the		TD C	C1	1	361	T .				
company's		Types of	Short-term		Mid-term	Long-term				
business,		risk and								
strategy, and	D: 1	opportunity		1.0		77				
financials	Risk	Transition	Total greenhouse		sumer demand and	Net zero				
(short-term,		risk	gas emissions		rences shift.	emissions				
mid-term, long-term).			control and	1	nsition to low-carbon and	trend				
term).			carbon tax,		c reduction technologies.					
			carbon fee.		lition of regulations					
				_	ning renewable energy					
				source						
					lequate climate adaptation					
					ares leading to a decline in					
		DI : 1	TD1 4		reputation.	TPI				
		Physical	The extreme		ased disasters causing supply	The				
		risk	changes in	cnain	disruptions.	average				
			climate patterns			temperature				
			lead to increased			rises.				
			flooding, causing							
			damage to one's							
			operational							
	0 4 1		assets.	E 1		E 1				
	Opportunity		The research and innovation of	Ennai	ncing resource efficiency.	Enhancing				
						corporate				
			new low-carbon			reputation.				
			products and							
		<u> </u>	services.	<u> </u>						
	Our company has assessed the aforementioned risks and presented climate-related risks and opportunities that may have significant financial impacts, along with the following response strategies:									
	Transition risk/Weather opportunity									
	Risk(R)/Oppo		-/+Financial Impact		Response Strategy					
	R: Greenhou	_	<ul> <li>Increase in operating</li> </ul>		-Strengthening green research and innovation					
	emissions control and carbon tax, carbon fee R: Addition of		costs due to carbon tax payment — Increase in operating		-Enhance energy efficiency and invest in green energy equipment					
	regulations go	overning	costs due to purchase of renewable energy certificates  — Non-compliance with regulatory requirements							
	renewable en									
	sources									
			regulatory requirement	nts						

	T	
	increased operating	
	expenses	
R: Enhance energy efficiency and invest in green energy equipment	- Increase in installation and operation costs of carbon reduction equipment	-Continue implementing greenhouse gas reduction actions -Construct green factories to obtain green building certification
		-Encourage suppliers to take climate mitigation and adaptation actions
-R: Consumer demand and preference shifts -O: Research and innovation of new low- carbon products and services	(R) Decrease in market sales, resulting in revenue decline     + (O) Increase the sales ratio of low-carbon products, thereby increasing revenue	-Continue investing in the research and development of low-carbon products -Use raw materials with low carbon footprint and reconfigure product components -Research and innovate green products
-R: Transition to low-carbon/plastic reduction technologies	-—Development of low- carbon new processes and plastic reduction technologies will increase research and development costs, and failure in development will lead to financial losses	-Establish a project research and development team and seek collaboration with external research teams to jointly develop optimized, low-carbon, and easy-to-manage low-carbon plastic reduction technologies
-R: Inadequate climate adaptation actions leading to a decline in brand reputation	— Inability to meet stakeholder expectations, resulting in damage to corporate reputation and reduced market sales	-Actively monitor and respond to climate- related issues, strengthen corporate social responsibility image, and increase customer identification
-O: Enhancing corporate reputation	+ Improve fundraising availability and reduce capital costs	-Enhance corporate green image through transparent disclosure -Strengthen corporate governance and establish a culture of prioritizing and acting on climate-related issues -Improve sustainability rating scores and establish a positive image.

	Physical risk/Weather opportunity	
Risk(R)/Opportunity(O)	-/+Financial Impact	Response Strategy
R: Extreme changes in climate patterns lead to increased flooding R: Supply chain disruptions (disasters)	— Decreased revenue due to operational site shutdowns  — Property loss due to damage to machinery and equipment  — Increased operating costs due to rising raw material prices  — Reduced product output leading to decreased revenue	- Evaluate new operational site locations or enhance flood protection infrastructure - Assess flood risk at production sites and implement risk mitigation measures - Develop alternative raw materials - Seek suppliers in other regions
R: Rise in average temperature O: Enhance resource efficiency	<ul> <li>(R) Increased operating</li> <li>expenses due to higher electricity</li> <li>consumption</li> <li>(R) Raw material shortages</li> <li>causing price increases</li> <li>(R) Increased costs or</li> <li>reduced output leading to</li> <li>decreased revenue</li> <li>(O) Reduced electricity costs</li> </ul>	<ul> <li>Construct green buildings         Use renewable energy</li> <li>Develop alternative raw         materials</li> <li>Procure energy-efficient         equipment</li> <li>Adopt environmental         management systems to         track energy usage</li> </ul>

<del></del>	
3. Describe the	Financial Impact of Extreme Climate Events
financial impact	Our company will identify potential risks to production or transportation stages due to disasters, changes
of extreme	in precipitation patterns, and extreme climate changes through internal discussions, inventory, and
climate events	evaluation. Heavy rainfall causing floods can lead to operational site shutdowns and equipment damage,
and transition	resulting in temporary shipping disruptions. Droughts and water shortages can affect the normal
actions.	operation of production lines, and during water shortages, the need to reduce water usage or transport
	water across regions increases operating costs. Changes in precipitation and climate patterns can also
	affect the transportation of some raw materials and finished products, leading to higher transportation
	costs.
	Financial Impact of Transition Actions
	Under transition risks, transitioning to a low-carbon economy may involve widespread policy and
	regulatory, technological, and market changes. Depending on the nature, speed, and focus of these
	changes within the analysis timeframe, carbon fees, greenhouse gas emissions control, renewable energy
	regulations, and shifts in consumer preferences could increase operating costs or reduce sales volumes.
	Considering our company's continuous innovation and diversification of related products, there is no
	significant impact on market sales in various scenarios. Therefore, the company focuses on analyzing
	operating costs. In the context of low-carbon transition, carbon pricing will financially impact the
	company's operations and supply chain costs.
	Our company will addresses these transition risks by implementing energy-saving and carbon-reduction
	projects to minimize the impact of energy consumption, water use, and waste on the climate. We
	enhance energy efficiency, invest in green energy equipment, and innovate green products to meet
	consumer demands. These projects will lead to increased capital investments and operating costs for the
	company.
4.Describe how	The Board of Directors is the highest decision-making body for risk control within the group, directly
the	overseeing the risk governance structure of each company within the group. To improve risk assessment
identification,	and enhance management functions, our company has established a risk management team responsible
assessment, and	for identifying and managing operational risks, including physical and transition risks related to climate
management of	change, and leading the planning of related response measures. We have set risk governance policies to
climate risks are	control potential risks arising from various business activities within acceptable limits, establishing
integrated into	sound risk management principles. The risk management team will conduct risk identification and
the overall risk	analysis across seven aspects: operations, finance, national, compliance, ESG, personnel, and
management	information security, and update the annual major risk identification matrix. Based on the risk
system.	identification results, each department will plan response strategies to integrate and manage risks that
	may affect operations and profitability. The team will report on management implementation and risk
	control to the Board of Directors, supervising and reviewing the management team's risk management
	practices to strengthen the company's resilience.
5.If scenario	The Company has not yet used scenario analysis to assess the resilience to climate change risks.
analysis is used	
to assess the	
impact of	
climate change	
risks, the	
context,	
parameters,	
assumptions,	
analysis factors,	
and major	
financial	
impacts should	
be explained. 6.If there is a	The also is intended to be described in the CH and the C
_	The plan is intended to be developed in the following directions:
plan to manage climate-related	Disk assessment and identification, establishing resonance strategies!
risk	Risk assessment and identification, establishing response strategies, enhancing employee awareness,
	technical upgrades, and implementation improvements to provide comprehensive management.
transformations,	The plan and cools will be anadyally implemented through the fell
please explain the contents of	The plan and goals will be gradually implemented through the following steps:
	Sufficiently reducing risks improving officiency providing risk assessment and applicate training
the plan and	Sufficiently reducing risks, improving efficiency, providing risk assessment, and employee training
how it addresses	coverage.
awareness and	
management of	

physical and	
transitional risks	
and targets.	
7.If internal	The Company did not use internal carbon pricing in 2024.
carbon pricing	
is used as a	
planning tool,	
the basis for	
price setting	
should be	
explained.	
8.If climate-	The company will set climate-related goals to reduce greenhouse gas emissions in line with global
related goals are set, the covered activities, greenhouse gas emission scopes, planning timeframe, and	reduction efforts to mitigate the impact of climate change on the environment and society. It is expected to cover production processes, supply chain management, energy use, transportation, and waste management; the emission scopes include direct and indirect emissions. The company hopes to plan these as long-term goals, with regular tracking and progress reporting to ensure effective monitoring and evaluation of goal achievement. The progress report will include related indicators such as emission reductions, carbon footprint, and energy use efficiency. The company does not use carbon offsets or renewable energy certificates (RECs) to achieve these goals yet.
annual progress	
information	
should be	
explained. If	
carbon offsets	
or renewable	
energy	
certificates	
(RECs) are used	
to achieve	
related goals,	
the source and	
amount of the	
carbon offsets	
or the number of	
renewable	
energy certificates	
(RECs) should	
be explained.	
9.Greenhouse	The company's main operating entity, Global Communication Semiconductor LLC (hereinafter referred
Gas Inventory,	to as GCS USA), complies with local regulations by conducting relevant statistics and monitoring of
Assurance,	greenhouse gas emissions. In 2024, GCS USA's direct greenhouse gas emissions totaled 7,602.9940
Reduction	metric tons, while indirect greenhouse gas emissions amounted to 1,493.7342 metric tons. GCS USA has
Targets,	carried out greenhouse gas inventory and verification in accordance with applicable laws and
Strategies, and	regulations. In addition to establishing related management policies, the company closely monitors and
Specific Action	cooperates with the implementation of government environmental protection policies and regulations.
Plans	cooperates with the implementation of government environmental protection policies and regulations.
1 14115	

(VII) 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
		No	Summary Description	Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies" and the reasons
I. Formulating ethical corporate management policies and plans  (I) 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			The Company has established the "Ethica Corporate Management Best Practic Principle" to express the policy of ethica management and prevent unethical conducts	e 1

			Operations	Difference from the "Ethical
Evaluation Item	Yes	No	Summary Description	Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies" and the reasons
incorporation and external documents; also, the commitment of the Board of Directors and management to actively substantiate the ethical corporate management policy?				
(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 covers the matters stated in Article 7, Paragraph 2 of the "Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies?"			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.	
(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?			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?		17	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.	
(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.	a dedicated unit 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?			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

			Operations	Difference from the "Ethical
Evaluation Item		No	Summary Description	Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies" and the reasons
(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
(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.	
III. Implementation of the company's whistleblowing system  (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?  (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?  (III) Does the company take measures to protect whistleblowers from retaliation due to whistleblowing?		V 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.	relevant reporting methods formulated in accordance with the actual situation in order to establish reporting channels and handling procedures.
IV. Enhance information disclosure 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?  V. If a company has formulated its "Ethical		V	The Company will disclose all relevant information of the Company on the Company's website and Market Observation Post System.	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."

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

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

### (IX) Implementation of internal control system

1. Internal Control Statement

# GCS Holdings Inc. Internal Control System Statement

February 18, 2025

The Statement on the Company's 2024 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, 2024, 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 18, 2025 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	Contents of Important Resolutions
	Directors and	1
	Shareholders	
	Meeting	
1/16/2024	The 6 <sup>th</sup> meeting	1. Adoption and Approual of Year 2024 budget.
	of the 5 <sup>th</sup> term	2. Adoption and Approval of Capital Contribution
	of office	Increase in Global Communication
		Semiconductors, LLC.
2/20/2024	The 7 <sup>th</sup> meeting	1. Review and Adoption of the Consolidated Financial
	of the 5 <sup>th</sup> term	Statements for the Year ended December 31, 2023
	of office	and Submission to the AGM to report that the
		Accumulated Losses Reached one half of the Paid-
		In Capital. (Note)
		2. Approval of Change of Certified Public
		Accountant. (Note)
		3. Adoption and Approval of Revised Corporate
		Policies. (Note)
		4. Adoption and Approval of 2023 Internal Control
		Statement. (Note)
		5. Adoption and Approval of Business Report of
		2023. (Note)
		6. Adoption and Approval of the 2023 Deficit
		Compensation Proposal. (Note)
		7. Review and Approval of (1) Stock Options and (2)
		Restricted Shares Grants Requests. (Note)
		8. Adoption and Approval of 2023 Employees' and
		Directors' Compensation. (Note)
		9. Review and Adoption of 2023 Executives' Bonus and 2024 Salary. (Note)
		10. Approval of the Annual General Meeting schedule
		and agenda.
		11. Approval of AGM Proposals submitted by
		Members holding 1% or more shares.
		12. Approval of Grant of Waivers to Directors'
		Engagement in any Business within the Scope of
		the Company's Business.
4/26/2024	The 8 <sup>th</sup> meeting	1. Adoption and Approval of Sale of Shares of
	of the 5 <sup>th</sup> term	Unikorn Semiconductor Corporation to Epistar
	of office	Corporation. (Note)
		2. Adoption and Approval of Purchase of the
		Equipment from Unikorn Semiconductor

Date	Board of	Contents of Important Resolutions
Bute	Directors and	Contents of Important resolutions
	Shareholders Meeting	
		Corporation by Globaol Communication
		Semiconductors, LLC. (Note) 3. Approval of Year 2024 Annual General Meeting
		schedule and agenda.
4/30/2024	The 9 <sup>th</sup> meeting	1. Approval of the consolidated financial statements
	of the 5 <sup>th</sup> term of office	for the first quarter of 2024, reviewed by the accountant. (Note)
		2. Approval of the Contribution Increase in Global
		Communication Semiconductors, LLC through
6/6/2024	Shareholders	Converting Outstanding Loan. (Note)  1. Passed Year 2023 Business Report.
0/0/2024	Meeting	2. Reported the Audit Committee's review of Year
	liteemig	2023 Financial Statements.
		3. Reported the distribution of employees' and
		directors' compensation for the Year 2023.
		4. Report on the implementation status of the resolution adopted at Year 2021 Extraordinary
		General Meeting regarding the cash capital increase
		through private placement.
		5. Report on the Company's accumulated losses
		reaching one-half of its paid-in capital.
		6. Approved Year 2023 Financial Statements.
		7. Approved Year 2023 Deficit Compensation Proposal.
		Proposal Implementation: It was resolved in the
		shareholders' meeting and executed accordingly.
		8. Approved the amendments to the "Procedures for
		Lending of Funds to Others." Proposal Implementation: The amended procedures
		were published on the Company's website and
		implemented in accordance with the revised
		provisions.
		9. Approved the proposal to release directors from non-competition restrictions.
		Proposal Implementation: The resolution was
		announced on the Market Observation Post System
		on June 6, 2024.
		10. Approved the proposal to sell the Company's equity
		=
		1 1
		completed in August 2024.
		11. Approved the proposal for Global Communication
		=
		<u> </u>
		÷ = = = = = = = = = = = = = = = = = = =

Date	Board of	Contents of Important Resolutions
Date	Directors and	Contents of Important Resolutions
	Shareholders	
	Meeting	
8/6/2024	The 10 <sup>th</sup>	1. Approval of the consolidated financial statements
0/0/2021	meeting of the	for the second quarter of 2024, reviewed by the
	5 <sup>th</sup> term of	accountant. (Note)
	office	2. Approval of the adjustment to the resolution passed
		at 2024 Annual General Meeting regarding the
		purchase of equipment by the subsidiary, Global
		Communication Semiconductors, LLC, from
		Unikorn Semiconductor Corporation. (Note)
		3. Approval of the proposal for the subsidiary, Global
		Communication Semiconductors, LLC, to
		purchase equipment from Unikorn Semiconductor
		Corporation. (Note)
		4. Approval of the fund lending by GCS Holdings,
		Inc. to its subsidiary, Global Communication
		Semiconductors, LLC. (Note)
		5. Approval of Corporate Policies of GCS Device
		Technologies, Co., Ltd. (Note)
		6. Approval of Change and Appointment of VP
		Finance/Controller of the Company. (Note)  7. Approval of Change and Appointment of Secretary
		7. Approval of Change and Appointment of Secretary of the Company.
11/5/2024	The 11 <sup>th</sup>	1. Approval of the consolidated financial statements
11/3/2024	meeting of the	for the third quarter of 2024, reviewed by the
	5 <sup>th</sup> term of	accountant. (Note)
	office	2. Approval of Year 2025 Annual Audit Plan. (Note)
		3. Approval of the cancellation and capital reduction
		of restricted shares previously granted to employees
		who have resigned. (Note)
		4. Approval of the Company's provision of collateral
		for the credit facility application by its subsidiary,
		GCS Device Technologies Co., Ltd., from CTBC
		Bank Co., Ltd. (Note)
		5. Approval of the fund lending by the subsidiary,
		Global Communication Semiconductors, LLC, to
		D-Tech Optoelectronics, Inc. (Note)
		6. Approval of Corporate Policies of the Company.
		<ul><li>(Note)</li><li>7. Approval of Internal Control System - Management</li></ul>
		of Sustainable Information. (Note)
		8. Approval of the Revision of Internal Audit Control
		Implementation Rules. (Note)
		9. Approval of Year 2024 Employees Stock Option
		Plan. (Note)
1/16/2025	The 12 <sup>th</sup>	1. Approval of Year 2025 Budget.
	meeting of the	2. Cancellation of Year 2024 Employees Stock
	5 <sup>th</sup> term of	Option Plan.
	office	
2/18/2025	The 13 <sup>th</sup>	1. Adoption of the Consolidated Financial Statements
	meeting of the	for the Year ended December 31, 2024. (Note)

Date	Board of	Contents of Important Resolutions
	Directors and	
	Shareholders	
	Meeting	
	5 <sup>th</sup> term of	2. Approval of Amended and Restated Articles of
	office	Association. (Note)
		3. Approval of Revision of Insider Trading and
		Nonpublic Material Information Management
		Rules. (Note)
		4. Approval of Year 2024 Internal Control Statement. (Note)
		5. Approval of Business Report of Year 2024. (Note)
		6. Approval of Year 2024 Deficit Compensation
		Proposal. (Note)
		7. Approval of Year 2024 Dividends Distribution.
		8. Approval of Year 2025 Employee Restricted Shares
		Plan. (Note)
		9. Approval of Restricted Shares Grants Requests. (Note)
		10. Approval of Year 2024 Employees' and Directors'
		Compensation.
		11. Adoption of Year 2024 Executives' Bonus and
		2025 Salary.
		12. Approval of Year 2025 Annual General Meeting
		agenda and proposals.
		13. Approval of AGM proposals submitted by
		members holding 1% or more shares.

(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

### IV. 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
DvvC Toivvon	Bai, Shu-Chian	1/1/2024	0.464	239	9,703	
PwC Taiwan	Liu, Chien-Yu	~12/31/2024	9,464	(Note)	9,/03	

Note: The "other non-audit fees" include NT\$80 thousand for tax attestation service, and NT\$159 thousand for tax consulting services.

- (I) If the CPA firm is replaced and the audit fee paid in the year of change is 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 the current year is more than 10% less than 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
- V. 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 boar	rd of directors on Feb	ruary 20, 2024.		
Reason for and description of the replacement	It was resolved by the board of directors on February 20, 2024.  The arrangement of replacement is in cooperation with the internal rotation adjustment of PwC Taiwan. Starting from the first quarter of 2024, the financial report's CPA for the company was changed from Bai, Shu-Chian and Cheng, Ya-Huei to Bai, Shu-Chian and Liu, Chien-Yu.					
Please state whether the	Status Par	ty	СРА	Client		
appointment is terminated or declined by the client	Automatic terminal of appointment	nation	NA	NA		
or the independent auditor	Decline of (conting appointment	nuous)	NA	NA		
	Audit report period	Aud repo opini	rt	audit report opinion		
The audit reports with an opinion other than unqualified opinion issued in the last two years and the reasons			As of June 30, 2 balance accounted represents 48 consolidated as comprehensive associates an accounted for method for th 2022, to June 30, 1, 2022, to June 30, 1, 2022, to June for 262% and consolidated income, respectively inclusion or recognized finathe investee Company's constatements for the 2022, which we the auditors, unable to described to the second statements for the auditors, unable to described to the second statements for the auditors, unable to described to the second statements for the auditors, unable to described to the second statements for the second statement statement statements for the second statement s	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		
	Consolidated Financial Report for the second quarter of 2023	Qualif opini	balance accountequity method represents 53 consolidated as comprehensive associates an accounted for method for the 2023, to June 30 1, 2023, to June 30 1, 2023, to June for 91% and consolidated income, respecting inclusion of recognized finate the investee Company's constatements for the 2023, which withe auditors,	ssets. The share of (loss) income of d joint ventures using the equity e periods April 1, 0, 2023, and January e 30, 2023, account 74% of the total comprehensive ctively. Due to the		

					necessary adjustments should be made to those amounts. Therefore, a qualified opinion is expressed.
			Acc	counting prin	ciples or practices
Is there a disagrapment	Yes		Dis	closures of fi	inancial statements
Is there a disagreement with the opinion of the	1 65		Au	dit scope or s	teps
issuer			Oth	iers	
issuci	No	V			
	Remarks:				
Other disclosures (Matters					
to be disclosed					
additionally as stated in					
Article 10, Paragraph 6,					
Subparagraph 1-4 ~ 1-7 of	None				
the "Regulations					
Governing Information to					
be Published in Annual					
Reports of Public					
Companies")					

### (II) Current independent auditors

CPA Firm	PwC Taiwan
Name of CPAs	Ms. Bai, Shu-Chian and Ms. Liu, Chien-Yu
Appointment date	It was resolved by the board of directors on February 20, 2024.
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 5, Subparagraph 1 and Subparagraph 2, Item 3 of the "Regulations": Not applicable
- VI. 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
- VII. 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

Unit: Shares

		202	24	As of April 7, 2025		
Job title	Name	Increase	Increase	Increase	Increase	
Job title		(decrease) in	(decrease) in	(decrease) in	(decrease) in	
		shareholding	shareholding	shareholding	shareholding	
Chairman and Head of						
Strategic Development	Huang, Ta-Lun	_	_	-	_	
Office						
Chief Executive Officer	Ann, Bau Hsing					
& President	Ann, bau rising	-	_	-	-	
Director	Representative of					
Director	Unikorn:	-	-	-	-	

			202	24	As of Apr	il 7, 2025
Job title	Name		Increase	Increase	Increase	Increase
Job Hile	Name		(decrease) in	(decrease) in	(decrease) in	(decrease) in
			shareholding	shareholding	shareholding	shareholding
	Ann, Bau Hsing					
	Representative	of				
Director	Unikorn:		-	-	-	-
	Su, Feng Cheng					
	Representative	of				
Director	Unikorn:		-	-	-	-
	Lee, Tsun Chung					
Independent Director	Tseng, Tsung-Lin		-	-	-	-
Independent Director	Chao, Mei-Chun		-	-	-	-
Independent Director	Lin, Shang-Yi			-	-	-
Senior VP of R&D	Wang, Shing-Kuo		(210,000)	_	(20,575)	_
Unit Senior VP of Sales	V. V. Ohana		(02,000)		17.505	
	Yu, Yeou-Chong		(93,000)	-	17,505	-
Senior VP of R&D	Wang, Samuel		125,000	_	(26,300)	_
Unit Senior VP of Sales	Yau, Wing		87,500		92,585	
VP of	rau, wing		87,300	-	92,363	-
Finance/Accounting	Mark	L.	15,000			
Unit	Raggio(Note 1)		13,000	_	_	_
VP of Operating Unit	Chen, Minkar		56,500	-	100	_
Corporate Governance	Lin Chu Wai		(10,000)		9,000	
Officer	Lin , Shu-Wei		(10,000)	-	9,000	-
Finance and Accounting Officer	Chang, Chih-Yu (Note 2)		-	-	8,708	-

Note 1: Dismissed on August 23, 2024, following the resolution on the change of the chief accounting officer approved by the Board of Directors on August 6, 2024. The statistical period for 2024 is from January 1, 2024 to August 23, 2024..

(II) The counterparty of the share transfer and pledge is a related party: None

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

April 7, 2025, Unit: Shares; % Name (title) and relationship between top 10 shareholders who are related Shareholdings of spouses Shareholdings in the Principal's shareholding parties, spouses, or relatives within the ma and minors name of others second degree of kinship to one another Name (Note 2) Number Number of Sharehold Sharehold Number of Sharehold Shares (Note Relations ing ratio Shares (Note ing ratio of Shares ing ratio Title (Name) (%) 1) (%) 1) (%) (Note 1) A subsidiary Harvestar of Investment **ENNOSTAR** Corp. Inc. A subsidiary Calystar of ENNOSTAR INC. 9,028,000 7.95% NA NA Investment **ENNOSTAR** Corp. Inc. A subsidiary **Epistar** of **ENNOSTAR** Corporation Inc. ENNOSTAR Inc. \_ Data not available

Note 2: Appointed on August 23, 2024, following the resolution on the change of the chief accounting officer approved by the Board of Directors on August 6, 2024. The statistical period for 2024 is from August 23, 2024 to December 31, 2024.

Name	Principal's sha	nreholding	Shareholdings and mir			ings in the f others	parties, spouses, or	elationship between rs who are related relatives within the nship to one another	Re ma
	Number of Shares (Note 1)	Sharehold ing ratio (%)	Number of Shares (Note 1)	Sharehold ing ratio (%)	Number of Shares (Note 1)	Sharehold ing ratio (%)	Title (Name)	Relations	
Representative: Peng, Shuang-Lang									
							Calystar Investment Corp.	All are subsidiaries of ENNOSTAR Inc.	
Harvestar Investment Corp.	9,013,000	7.94%	NA	NA	_	_	ENNOSTAR INC.	Parent- subsidiary relationship	
							Epistar Corporation	All are subsidiaries of ENNOSTAR Inc.	
Harvestar Investment Corp. Representative: Peng, Shuang-Lang	_	_	Data not available						
							Harvestar Investment Corp.	All are subsidiaries of ENNOSTAR Inc.	
Calystar Investment Corp.	6,500,000	5.72%	NA	NA	_	_	ENNOSTAR INC.	Parent- subsidiary relationship	
							Epistar Corporation	All are subsidiaries of ENNOSTAR Inc.	
Calystar Investment Corp. Representative: Peng, Shuang-Lang	_	_			Dat	a not ava	ilable		
Joray Co., Ltd.	4,750,063	4.18%	NA	NA	l	a not lable	_	_	
Joray Co., Ltd. Representative: Chong-Ren Huang	_	_			Dat	a not ava	ilable		
Allianz Global Investors Taiwan Technology Fund	4,000,000	3.52%	NA	NA	l	not lable	_	_	
Turvair Feetinglegy Fund					u vu.		Calystar Investment Corp.	All are subsidiaries of ENNOSTAR Inc.	
Epistar Corporation	3,500,000	3.08%	NA	NA	_	_	Harvestar Investment Corp.	All are subsidiaries of ENNOSTAR Inc.	
							ENNOSTAR INC.	Parent- subsidiary relationship	
Epistar Corporation Representative: Tang, Hsiu- Mu	_	_			Dat	a not ava	ilable		
Wei,Shih-Yu	2,920,886	2.57%	_	_	_	_	_	_	
Chuan Wei Investment Co., Ltd.	2,500,000	2.20%	NA	NA	l	a not lable	_	_	
Chuan Wei Investment Co., Ltd.	_	_			Dat	a not ava	ilable		

Name	Principal's sha	nreholding	Shareholdings and min		Sharehold name o	ings in the f others	top 10 shareholder parties, spouses, or	elationship between rs who are related relatives within the nship to one another	Re ma
	Number of Shares (Note 1)	Sharehold ing ratio (%)	Number of Shares (Note 1)	Sharehold ing ratio (%)	Number of Shares (Note 1)	Sharehold ing ratio (%)	Title (Name)	Relations	
Representative: Zhiguang Yan									
Allianz Global Investors Taiwan Fund	2,304,000	2.03%	NA	NA	Data avail	not lable	I	_	
Citibank Custody Barclays Capital SBL/PB Investment Account		1.46%	NA	NA	Data avail			_	

Note 1: It is the information recorded in the shareholder register of the Company's latest book-entry closing date (April 7, 2025).

IX. 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, 2024

Investee company (Note 1)	The Company's investment		Investment of directors, sup managerial of directly or inc controlled bu entities	ervisors, fficers, and directly	Consolidated investment		
	Number of shares	Sharehold ing ratio	Number of shares	Shareholdi ng ratio	Number of shares	Sharehold ing ratio	
GCS USA	(Note 2)	100%	-	-	(Note 2)	100%	
GCS Device Technologies Co., Ltd.	1,200,000	100%	-	-	1,200,000	100%	
D-Tech Optoelectronics, Inc.	-	-	360,000	100%	360,000	100%	
D-TECH Optoelectronics (Taiwan) Corporation (Note 4)	-	-	1,800,000	100%	1,800,000	100%	
Changzhou ChemSemi Co., Ltd.	(Note 3)	20.69%	-	-	(Note 3)	20.69%	
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.

Note 4: On November 1, 2022, the company's board of directors resolved to dissolve and liquidate the subsidiary D-TECH Optoelectronics (Taiwan) Corporation. The Company obtained the

dissolution registration letter approved by the authority on December 22, 2023 and the liquidation completion letter issued by the court on November 21, 2024. The liquidation process has not yet been completed as of the annual report publication date.

## Three. Capital Overview

- I. Capital and Shares
  - (I) Source of capital
    - 1. Formation of capital

April 7, 2025; Unit: NTD

							April 7, 2025; U	nit: NTD
	Issue	Authori	zed capital	Paid-in	capital		Remarks	
Month / Year	price (NT\$)	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.		
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		
October 2013	10	70,000,000	700,000,000	36,973,587	369,735,870	New restricted employee shares increased by 106,000 shares		
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		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		
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		
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 new restricted		

	Issue	Authori	zed capital	Paid-in	capital		Remarks	
Month / Year	price (NT\$)	Shares	Amount	Shares	Amount	Source of capital	Paid-in capital with property other than cash	Others
						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		
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		
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		
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		
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		
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		
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		
January – April 2018	10	90,000,000	900,000,000	81,929,001	819,290,010		None	

	T	Authori	zed capital	Paid-in	capital	]	Remarks	
Month / Year	Issue price						Paid-in capital	
	(NT\$)	Shares	Amount	Shares	Amount	Source of capital	with property other than cash	Others
						employee stock		
						options, converted		
						corporate bonds to		
						new shares, and		
						issued new restricted		
						employee shares		
						Exercised	None	
						employee stock		
May 2018	10	200,000,000	2,000,000,000	81,980,334	819,803,340	options and		
_				, ,		canceled new restricted		
						employee shares		
June – December	10	200,000,000	2,000,000,000	82,169,126	821,691,260		None	
2018						employee stock		
						options, issued		
						new restricted		
						employee shares, and canceled new		
						restricted		
						employee shares		
January – March 2019	10	200,000,000	2,000,000,000	90,177,022	901,770,220	Issuance of Global	None	
						Depositary		
						Receipts (GDR), exercise of		
						employee stock		
						options, and		
						cancellation of		
						new restricted		
April – June 2019	10	200,000,000	2,000,000,000	90,747,022	007 470 220	employee shares Issuance of new	None	
April – Julie 2019	10	200,000,000	2,000,000,000	90,747,022	907,470,220	restricted	None	
						employee shares		
July - September	10	200,000,000	2,000,000,000	90,791,129	907,911,290		None	
2019						employee stock		
October – December	10	200,000,000	2,000,000,000	90,833,504	908,335,040	options	None	
2019	10	200,000,000	2,000,000,000	90,833,304		employee stock		
2019						options and		
						canceled new		
						restricted		
January – July 2020	10	200,000,000	2,000,000,000	01 251 504	012 515 040	employee shares Issuance of new	None	
January – July 2020	10	Z00,000,000	۷,000,000,000 ا	91,351,504	913,313,040	restricted restricted	INOHE	
						employee shares		
August 2020	10	200,000,000	2,000,000,000	91,400,462	914,004,620	Exercised	None	
						employee stock		
Contombon O-4-1	10	200,000,000	2,000,000,000	01 425 254	014 252 540	options	None	
September – October 2020	10	200,000,000	∠,000,000,000 	91,435,254	914,352,540	employee stock		
						options		
November 2020 -	10	200,000,000	2,000,000,000	91,405,754	914,057,540	Cancelled new	None	
March 2021						restricted		
A mil 2021 A	10	200,000,000	2 000 000 000	01 922 254	010 000 540	employee shares	Nama	
April 2021 – August 2021	10	200,000,000	2,000,000,000	91,823,254	918,232,540	Issuance of new restricted	INone	
2021						employee shares		
						and cancellation of		
						new restricted		
Contour! 2021	10	200,000,000	2 000 000 000	01.727.577	017 075 770	employee shares	Nama	
September 2021 – November 2021	10	200,000,000	2,000,000,000	91,726,567	917,265,670	employee stock	None	
1.0 (6111061 2021						options and		
						canceled treasury		
						stock		
December 2021 -	10	200,000,000	2,000,000,000	110,676,067	1,106,760,670	Exercised	None	

	Issue	Authori	zed capital	Paid-in	capital		Remarks	ı
Month / Year	price (NT\$)	Shares	Amount	Shares	Amount	Source of capital	Paid-in capital with property other than cash	Others
February 2022						employee stock options, canceled treasury stock and new restricted employee shares, and issued 20,000,000 common stock shares through private placement		
March – April 2022	10	200,000,000	2,000,000,000	110,882,567	1,108,825,670	for cash capital increase  Exercised employee stock options, issued new restricted employee shares, and canceled new restricted employee shares	None	
May –October 2022	10	200,000,000	2,000,000,000	110,842,067	1,108,420,670	and treasury stock Cancelled new restricted employee shares	None	
November 2022~Feburary 2023	10	200,000,000	2,000,000,000	110,825,067	1,108,250,670		None	
March 2023~July 2023	10	200,000,000	2,000,000,000	111,310,734	1,113,107,340			
August 2023~February 2024	10	200,000,000	2,000,000,000	111,283,234	1,112,832,340		None	
March 2024~ 2024 July	10	200,000,000	2,000,000,000	111,834,924	1,118,349,240	Issuance of new restricted employee shares	None	
August 2024~ 2024 September	10	200,000,000	2,000,000,000	111,904,924	1,119,049,240		None	
October 2024	10	200,000,000	2,000,000,000	112,014,924	1,120,149,240		None	
November 2024	10	200,000,000	2,000,000,000	112,071,174	1,120,711,740	Exercised employee stock options, cancelled new restricted employee shares		
December 2024	10	200,000,000	2,000,000,000	112,338,362	1,123,383,620		None	
January 2025	10	200,000,000	2,000,000,000	112,517,676	1,125,176,760		None	
February 2025	10	200,000,000	2,000,000,000	113,006,668	1,130,066,680		None	
March 2025	10	200,000,000	2,000,000,000	113,579,251	1,135,792,510			

### 2. Type of stock shares issued

April 7, 2025; Unit: Shares

Type of	Au	al			
Type of Stock	Outstanding stock shares	Unissued shares	Total	Remarks	
Common stock	113,579,251	86,420,749	200,000,000	Outstanding stock shares include: TPEx listing: 93,579,251 shares Private placement: 20,000,000 shares	

3. Information on the shelf registration system: Not applicable

### (II) 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 7, 2025

		71pm 7, 2020
Shares Major shareholders	Shareholdings (shares)	Shareholding ratio
ENNOSTAR INC.	9,028,000	7.95%
Harvestar Investment Corp	9,013,000	7.94%
Calystar Investment Corp.	6,500,000	5.72%
Joray Co., Ltd.	4,750,063	4.18%
Allianz Global Investors Taiwan Technology	4,000,000	3.52%
Fund		
Epistar Corporation	3,500,000	3.08%
Wei,Shih-Yu	2,920,886	2.57%
Chuan Wei Investment Co., Ltd	2,500,000	2.20%
Allianz Global Investors Taiwan Fund	2,304,000	2.03%
Citibank Custody Barclays Capital SBL/PB	1,659,000	1.46%
Investment Account		

Note: This is the shareholder register information as of the latest book closure date, which was April 7, 2025.

### (III) 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, realized or unrealized, 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 recognizes 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 a share premium account or any other fund or account which can be authorized 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, at 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 the 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 18, 2025 not to have dividends distributed.

- 3. Expected significant changes in dividend policy: None
- (IV) The impact of the proposed stock dividend in the current year on the Company's operating performance and earnings per share: NA
- (V) 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 the 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 in 2024. The board of directors resolved on February 18, 2025 not to distribute compensation to employees and directors; also, the 2024 financial report does not include estimated compensation of employees and directors.

- (2) The amount of employee compensation paid with stock shares and the 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 a 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 in 2023. The board of directors resolved on February 20, 2024 not to distribute compensation to employees and directors; also, the 2023 financial report does not include estimated compensation of employees and directors.

(VI) The Company's repurchasing the Company's stock shares: None

II. Disclosure of corporate bond: None

III. Disclosure of preferred stocks: None

April 7, 2025

		Issue (process) date	
Item			January 21, 2019
	Issuance and train	nsaction place	The Luxembourg Stock Exchange (LuxSE)
	Total amou	nt issued	US\$13,120,000
	Unit issu		US\$8.20
	Total number o		1,600,000 units
Т	The source of secur		Issuance of new shares from cash capital increase
	Amount of securi	ties represented	Global Depositary Receipts (GDR) per unit representing interest in 5 common stock shares of the Company
Rights	s and Obligations of Hold	of Depository Receipt ers	Same as the rights and obligations of common stock
	Trust	tee	NA
	Depository i	institution	The Bank of New York Mellon
	Custodian i	nstitution	Mega Bank
	Unredeeme		Fully redeemed
		on the relevant costs issuance and during the period	Borne by the issuing company
Importa	nt agreements for contra	depositary and custody acts	Please refer to the depository agreement and custody contracts for details
Market price per		Max.	US\$ 20.94
unit	2024	Min.	US\$ 4.38
(US\$)		Average	US\$ 7.47
		Max.	US\$ 22.31
	As of April 7,	Min.	US\$ 15.27
	2025 (Note 1)	Average	US\$ 19.31

Note 1: As of the annual report publication date (April 7, 2025).

- V. Disclosure of employee stock options
  (I) The company's outstanding employee stock options:
  1. Employee stock option plan in 2014~2018:

April 7, 2025

Types of Employee Stock Warrants	2014 Employee stock option plan	2015 Employee stock option plan	2016 Employee stock option plan	2017 Employee stock option plan	2018 Employee stock option plan
The effective date of declaration and the total number of 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	1/7/2019 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	797.2 units (207.773 units expired)	934 units (190 units expired)	230 units (15 units expired)	400 units (69 units expired)	618 units (113 units expired)
Remaining units for issuance	202.8 units ( Note 3)	66 units ( Note 3)	770 units ( Note 3)	600 units ( Note 3)	382 units ( Note 3)
The ratio of subscribed shares to the total number of shares issued	0.70%	0.82%	0.20%	0.35%	0.54%
Contract performance		Issuance of new shares	Issuance of new shares	Issuance of new shares	Issuance of new shares
Restricted subscription period and ratio (%)	two full years have elapsed after the Grant Date, the Optionee may exercise his/her Options in accordance with the schedule and	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.	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 Optione, the Optionee may exercise ratably in	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  As to the remaining 50% of the Optiones, the Optionee may exercise	full years have elapsed after the Grant Date, the Optionee may exercise his/her Options in accordance with the schedule and percentage listed below:  2. From two years after the Grant Date, the Optionee may exercise up to 50% of the Options, and
Number of shares already exercised	589,427 shares	401,000 shares	200,000 shares	58,000 shares	180,000 shares
Amount of exercised stock options	NT\$23,402,628	NT\$25,338,200	NT\$12,680,000	NT\$4,646,600	NT\$10,448,000
Number of unexercised stock options	-	343,000 shares	15,000 shares	273,000 shares	325,000 shares
Exercise price per share for unexercised stock options	-	NT\$61.40~62.70	NT\$54.50	NT\$61.00~79.70	NT\$58.20
Ratio of unexercised stock options to the total issued shares (%)	-	0.30%	0.01%	0.24%	0.29%
Impact on shareholders' equity		ncial statements is handl s' equity to be diluted yea	ed in accordance with general by year.	erally accepted accounting	g principles, and it causes

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

- (1) 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, 207,773 shares expired.
- (2) 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.
- (3) 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.
- (4) 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, 69,000 shares expired.
- (5) The 2018 Employee stock option plan: 578,000 shares were issued on March 15, 2019; 40,000 shares were issued on August 9, 2019 for a total of 618,000 shares, of which, 113,000 shares expired.
- Note 2: It is calculated based on the total issuance of 113,579,251 shares.
- Note 3: Issuance period has expired.

### 2. The 2019-2022 Employee Stock Option Plan:

April 7, 2025

				71pm 7, 2025
Types of Employee Stock Warrants	Employee stock option plan	2020 Employee stock option plan	2021 Employee stock option plan	Employee stock option plan
Effective date of declaration and total number of 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
Duration	10 years	10 years	10 years	10 years
Number of units issued	259 units (70 units expired)	840 units (265.25 units expired)	513 units (75.833 units expired)	136 units (20 units expired)
Remaining units for issuance	741 units ( Note 3)	160 units ( Note 3)	487 units ( Note 3)	864 units
The ratio of subscribed shares to the total number of shares issued	0.23%	0.74%	0.45%	0.12%
Contract performance	Issuance of new shares	Issuance of new shares	Issuance of new shares	Issuance of new shares
Restricted subscription period and ratio (%)	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	<ol> <li>From two years after the Grant Date, the Optionee may exercise up to 50% of the Options.</li> <li>As to the remaining 50% of the Optionee may exercise ratably in equal</li> </ol>	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	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
Number of shares already exercised	68,000 shares	255,084 shares	160,625 shares	7,500 shares
Amount of exercised stock options	NT\$2,988,000	NT\$12,422,594	NT\$7,193,603	NT\$289,875
Number of unexercised stock options	121,000 shares	319,666 shares	276,542 shares	108,500 shares
Exercise price per share for unexercised stock option	NT\$43.80~52.50	NT\$48.70	NT\$35.05~45.90	NT\$30.35~NT\$38.65
Ratio of unexercised stock option to the total issued shares (%)	0.11%	0.28%	0.24%	0.10%
Impact on shareholders' equity		l statements is handled in acco olders' equity being diluted yea		ed accounting principles, and

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

- (1) 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.
- (2) 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, 265,250 shares expired.
- (3) 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, 75,833 shares expired.

(4) The 2022 Employee Stock Option Plan: 40,000 shares were issued on February 20, 2023, and 75,000 shares were issued on May 2, 2023, and 18,000 shares were issued on July 17, 2023, and 3,000 shares were issued on February 20, 2024 for a total of 136,000 shares, of which, 20,000 shares expired.

Note 2: It is calculated based on the total issuance of 113,579,251 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 7, 2025 Unit: USD/NTD; shares

				The ratio of the		F	Executed	_		<u> </u>	Not executed		
	Job Title	Name	of shares	number of shares acquired to the total number of shares issued (Note 1)	Number of shares subscribe d	Stock subscription price executed	Stock subscription amount executed	The ratio of the number subscribed to the total number of shares issued (Note 1)	of shares	Stock subscription price not executed	Stock subscription amount not executed	The ratio of number subscribed to total number shares issued (Note 1)	not the
	Chief Executive Officer & President	Ann, Bau Hsing											
	Senior VP of R&D Unit	Wang, Shing-Kuo											
Managerial Officers	VP of Operating Unit	Chen, Minkar	2 270 000		1,287,708	NT\$11.35~ NT\$64.10	NT\$42,742,112	1.13%	1 227 7U7 1	NT\$43.80~ NT\$79.70	NT\$54,043,903		
	Senior VP of Sales	Yu, Yeou-Chong	2,370,000 (200,000 shares expired)									0.78%	ļ
	Controller of Finance /Accounting Unit	Chang, Chih-Yu											
	Senior VP of R&D Unit	Wang, Samuel											
	Senior VP of Sales	Yau, Wing											
	Corporate Governance Officer	Lin, Shu-Wei											
	CAD Senior Engineering Manager	Chen, Frank J											
	Special Assistant	Curtis, Jerry (Note 2)	1	'		NT\$11.35~ NT\$79.70		1.47%		NT\$43.80~ NT\$79.70	NT\$20,399,448	0.31%	
	VP of Quality Unit	Fraser, James											
	Senior VP of R&D Unit	Hou, Liping	2,251,000 (224,083 shares expired)										
Employee	Direct of R&D Unit	Kumar, Dhiraj (Note 2)		1.98%	1,671,083		NT\$62,062,357						
	Special Assistant to President	Li, Ya Ching (Note 2)											
	VP of Process Engineering	Luu, Lena T											
	VP of of Finance /Accounting Unit	Mark L. Raggio (Note 2)											

		The ratio of the			Executed			N	Not executed	
Job Title	Name	Number of shares acquired of shares acquired acquired number of shares issued (Note 1)	Number of shares subscribe d	clincomntion	Stock subscription amount executed	The ratio of the number subscribed to the total number of shares issued (Note 1)	of shares	subscription	Stock subscription amount not executed	The ratio of the number no subscribed to the total number o shares issued (Note 1)
Head of R&D Unit and President of D- Tech Optoelectronics, Inc.	Wu, Xiucheng									
VP of R&D Unit	Yang, Yuefei									

Note 1: It is calculated based on the total issuance of 113,579,251 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

|--|

	ſ	April 7, 2023
Type of new restricted	2022 New Restricted Employee	2023 New Restricted Employee
employee shares	Shares plan	Shares plan
Date of effective registration and number of total shares	10/12/2022 1,000,000 shares	11/7/2023 1,000,000 shares
Issue Date	Note 1	Note 1
New restricted employee shares issued	483,000 shares	977,690 shares
Number of new restricted employee shares available to be issued	517,000 shares (Note 3)	22,310 shares
Issue price	NT\$0	NT\$0
The ratio of new restricted employee shares issued to the total number of shares issued	0.43%	0.86%
Vesting conditions of new restricted employee shares	being granted the RS still stays employed, the percentage of the RS awards shall vest in accordance with the following schedule:  A. First anniversary of the Grant Date, 50% of the total number of the granted RS.  B. Second anniversary of the Grant Date, 50% of the total number of the granted RS.  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.  The Grant Date and the first day of	the granted RS.  B. Second anniversary of the Grant Date, 50% of the total number of the granted RS.  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

Type of new restricted	2022 New Restricted Employee	2023 New Restricted Employee
employee shares	Shares plan	Shares plan
1	Shares plan  this Plan means the record date of the capital increase.  The rights to the RS issued based on this Plan will be restricted as follows:  (1) The employee shall not, with the exception of inheritance, sell, hypothecate, assign, give to others as a present, pledge or dispose in other way until such RS have vested.  (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.  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	Shares plan  this Plan means the record date of the capital increase.  The rights to the RS issued based on this Plan will be restricted as follows:  (1) The employee shall not, with the exception of inheritance, sell, hypothecate, assign, give to others as a present, pledge or dispose in other way until such RS have vested.  (2) The employee will have rights to attend, submit proposals, make a speech, vote at any meeting of shareholders
restricted employee	to vote and act at any meeting of shareholders.	issued for cash capital increase and to vote and act at any meeting of shareholders.  Trust custody, appointed custody, and bank custody
shares	Methods to handle the unvested	Methods to handle the unvested
Measures to be taken when vesting conditions are not met	RS awards or in the event of inheritance:	RS awards or in the event of inheritance:  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

Type of new restricted	2022 New Restricted Employee	2023 New Restricted Employee
employee shares	Shares plan	Shares plan
**	Shares plan  employment with the Company. Such unvested RS awards will be deemed not meeting vesting schedule as of the effective date of such employment termination.  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.  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	Shares plan  employment with the Company. Such unvested RS awards will be deemed not meeting vesting schedule as of the effective date of such employment termination.  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.  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.  D. Death: The Company shall	temporary leave without pay.  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	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.  E.Disability or Death Caused by Work Injury:  a. In the event that the	deemed not meeting vesting schedule as of the date of the employee's death.  E.Disability or Death Caused by Work Injury:  a. In the event that the
	employee is physically	

Type of new restricted	2022 New Restricted Employee	2023 New Restricted Employee
employee shares	Shares plan	Shares plan
7 -	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.  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.  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.	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.  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.  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.
	G. Transfer: To facilitate the Company's business operation needs, an employee who is approved by the Chairman or his	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	delegate to be transferred by the Company to a company which
	has the controlling or subordinate relationship with the Company (or within	has the controlling or subordinate relationship with the Company (or within
	subsidiaries), the rights and obligations of all unvested RS	subsidiaries), the rights and obligations of all unvested RS
	awards shall not be affected. If an employee is transferred to the	awards shall not be affected. If an employee is transferred to the
	company which does not have	company which does not have
	the controlling or subordinate relationship with the Company,	the controlling or subordinate relationship with the Company,

Type of new restricted	2022 New Restricted Employee	2023 New Restricted Employee				
employee shares	Shares plan	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	25,000 shares	14,000 shares				
Number of released new restricted employee shares	458,000 shares	268,845 shares				
Number of unreleased new restricted shares	-	694,845 shares				
The ratio of restricted shares to the total number of issued shares (%)	-	0.61%				
Impact on shareholders' equity		It does not cause the original shareholders' equity to be diluted significantly.				

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

The 2022 New restricted employee shares: 483,000 shares were issued on February 20, 2023, of which 16,500 shares were redeemed and canceled, and 8,500 shares were redeemed but not yet canceled.

The 2023 New restricted employee share plan: 551,690 shares were issued on February 20, 2024, of which 14,000 shares were redeemed and canceled. 426,000 shares were issued on February 18, 2025.

Note 2: It is calculated based on the total issuance of 113,579,251 shares.

Note 3: The 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 7, 2025 Unit: Shares

restricted employee sharined to employee sharined t				Number of	The ratio of new		Rest	tricted righ	ts vested		Unve	ested restric	cted rights
Strategic Development Office   Hung, 1a-Lun   Chief Executive Officer & President   Senior VP of R&D Unit   Wang, Shing-Kuo   VP of Operating Unit   Chen, Minkar   Senior VP of Sales   Viv, Yoou-Chong   Controller of Finance   Chang, Chih-Yu   Senior VP of Sales   Vau, Wing   Comporate   Governance   Ching, Chih-Yu   Senior VP of Sales   Vau, Wing   Coporate   Governance   Chen, Frank J   Special assistant   Curtis, Jerry (Note 2)   VP of Quality Unit   Fraser, James   Special Assistant to President   Senior VP of R&D Unit   Senior VP of Mark L. Raggio   VP of Finance/Accounting   VP of Finance/Accounting   Salvador, Elmer   Salvador, Elm		Job Title	Name	restricted employee shares	shares obtained to the total number of	of unrestric ted			unrestricted shares to the total number of issued	of restricte	Issue price	amount	shares to the total number of issued
Pessident			Huang, Ta-Lun										
We of Operating Unit Chen, Minkar  Managerial Officers  Por of Sales Vin, Yeou-Chong Controller of Finance Accounting Unit Senior VP of R&D Unit Senior VP of Sales Vin, Yeou-Chong Comporate Officer  CAD Senior Engineering Manager  Chen, Frank J Special Assistant Curtis, Jerry (Note 2) VP of Quality Unit Special Assistant to President of Portech Win, Xiucheng Operations Head of R&D Unit and President of D-Tech Wu, Xiucheng Optoclectronics, Inc.  Portion of Sales Vin, Yeou-Chong (25,000 shares expired)  1,531,630 (25,000 shares expired)  1,338,815 1.18% 167,815 0.15%  1,338,815 1.18% 167,815 0.15%  1,338,815 0.15%			Ann, Bau Hsing				-	-	1.18%				
Managerial Officers   Senior VP of Sales   Yu, Yeou-Chong   (25,000 shares expired)   (1,331,630   22,000 shares expired)   (25,000 shares expired		Senior VP of R&D Unit	Wang, Shing-Kuo										
Managerat   Officers   Senior VP of Sales   Yu, Yeou-Chong   (25,000 shares   1.35%   1.338,815   -   -   1.18%   167,815   -   -   0.15%		VP of Operating Unit	Chen, Minkar	1 531 630		1,338,815 -				167,815	-	-	0.15%
Controller of Finance /Accounting Unit Senior VP of R&D Unit Senior VP of Sales Yau, Wing Corporate Officer  CAD Senior Engineering Manager Special Assistant Curtis, Jerry (Note 2) VP of Quality Unit Senior VP of R&D Unit Special Assistant to President VP of Finance/Accounting Unit VP of Finance/Accounting Unit VP of Manufacturing Operations Head of R&D Unit and President of D-Tech Optoelectronics, Inc.    Chang, Chih-Yu   Assignment   Corporate   Corp		Senior VP of Sales	Yu, Yeou-Chong	(25,000 shares	1.35%								
Senior VP of Sales Yau, Wing Corporate Governance Lin, Shu-Wei  CAD Senior Engineering Chen, Frank J Special assistant Curtis, Jerry (Note 2) VP of Quality Unit Fraser, James Senior VP of R&D Unit Hou, Liping Special Assistant to President Li, Ya Ching (Note 2) Employee VP of France/Accounting Mark L. Raggio (Note 2) VP of Finance/Accounting Mark L. Raggio (Note 2) VP of Manufacturing Operations Head of R&D Unit and President of D-Tech Optoelectronics, Inc.  Senior VP of Sales Yau, Wing Chen, Frank J Shu-Wei Chen, Frank J	Officers		Chang, Chih-Yu										
Corporate Officer  CAD Senior Engineering Chen, Frank J Special assistant Curtis, Jerry (Note 2)  VP of Quality Unit Fraser, James Senior VP of R&D Unit Hou, Liping Special Assistant to President Li, Ya Ching (Note 2)  Employee  VP of Process Engineering Unit VP of Manufacturing Operations Head of R&D Unit and President of D-Tech Optoelectronics, Inc.  Liu, Shu-Wei  Chen, Frank J  1,132,060 11		Senior VP of R&D Unit	Wang, Samuel										
CAD Senior Engineering Manager Special assistant Curtis, Jerry (Note 2) VP of Quality Unit Senior VP of R&D Unit Special Assistant to President Unit VP of Finance/Accounting Unit VP of Manufacturing Operations Head of R&D Unit and President of D-Tech Optoelectronics, Inc.  1,132,060 1,													
Special assistant Curtis, Jerry (Note 2)  VP of Quality Unit Fraser, James  Senior VP of R&D Unit Hou, Liping Special Assistant to President Li, Ya Ching (Note 2)  Employee VP of Process Engineering VP of Finance/Accounting Mark L. Raggio (Note 2)  VP of Manufacturing Operations Head of R&D Unit and President of D-Tech Optoelectronics, Inc.  I 1,132,060 15,000 shares were cancelled, 7,500 were redeemed but not yet cancelled)  1,132,060 15,000 shares were cancelled, 7,500 were redeemed but not yet cancelled)													
VP of Quality Unit Fraser, James Senior VP of R&D Unit Hou, Liping Special Assistant to President Li, Ya Ching (Note 2)  Employee VP of Process Engineering Luu, Lena T VP of Finance/Accounting Mark L. Raggio (Note 2) VP of Manufacturing Operations Head of R&D Unit and President of D-Tech Optoelectronics, Inc.  1,132,060 (15,000 shares were cancelled, 7,500 were redeemed but not yet cancelled)  1,32,060 (15,000 shares were cancelled, 7,500 were redeemed but not yet cancelled)		CAD Senior Engineering Manager	Chen, Frank J				965,030 -			144,530	-	-	0.13%
Senior VP of R&D Unit Hou, Liping Special Assistant to President Li, Ya Ching (Note 2)  Employee  VP of Process Engineering Luu, Lena T VP of Finance/Accounting Unit (Note 2)  VP of Manufacturing Operations Head of R&D Unit and President of D-Tech Optoelectronics, Inc.  Senior VP of R&D Unit Hou, Liping 1,132,060 (15,000 shares were cancelled, 7,500 were redeemed but not yet cancelled)  1% 965,030 0.85% 144,530 0.13%		Special assistant	Curtis, Jerry (Note 2)	(15,000 shares were cancelled, 7,500 were redeemed but not yet				-	0.85%				
Employee  VP of Process Engineering Unit  VP of Manufacturing Operations Head of R&D Unit and President of D-Tech Optoelectronics, Inc.  (15,000 shares were cancelled, 7,500 were redeemed but not yet cancelled)  1%  965,030  - 0.85%  144,530  - 0.85%  144,530  - 0.85%		VP of Quality Unit	Fraser, James										
Employee  VP of Process Engineering Unit  VP of Manufacturing Operations  Head of R&D Unit and President of D-Tech Optoelectronics, Inc.  VP of Process Engineering Unit  Note 2)  were cancelled, 7,500 were redeemed but not yet cancelled)  1%  965,030  0.85%  144,530  0.85%  144,530  0.85%		Senior VP of R&D Unit	Hou, Liping										
WP of Finance/Accounting Unit (Note 2)  VP of Manufacturing Operations  Head of R&D Unit and President of D-Tech Optoelectronics, Inc.  Provided the provided that the provided Head of R&D Unit and Optoelectronics, Inc.  Note 2 1965,030 - 10.85% 144,530 - 10.85\% 144,530 - 10.85\% 144,530 - 10.85\%		Special Assistant to President	Li, Ya Ching (Note 2)										
VP of Finance/Accounting Mark L. Raggio Unit (Note 2)  VP of Manufacturing Operations  Head of R&D Unit and President of D-Tech Optoelectronics, Inc.  redeemed but not yet cancelled)	Employee				1%	965,030							
VP of Manufacturing Operations  Head of R&D Unit and President of D-Tech Optoelectronics, Inc.  Cancelled)		Unit	(Note 2)										
President of D-Tech Wu, Xiucheng Optoelectronics, Inc.		VP of Manufacturing Operations	Salvador, Elmer										
VP of R&D Unit Yang, Yuefei		President of D-Tech	Wu, Xiucheng										
		VP of R&D Unit	Yang, Yuefei										

Note 1: It is calculated based on the total issuance of 113,579,251 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 companies' 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) 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.
- (4)Intended fund utilization: It is to replenish working capital, invest, 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:

December 31, 2024; Unit: NT\$ Thousands

Project items		Implementa	tion	Progress ahead or behind schedule, root causes, and improvement plans		
Investment in	Amount	Estimated	700,000			
Unikorn	used	Actual	700,000			
Semiconductor Corp.		Estimated	100.00%			
(hereinafter referred to as "Unikorn")	Progress (%)			The project was completed		
	Amount	Estimated	115,800	in the fourth quarter of		
Replenish	used	Actual	115,800	]2024.		
working capital	Progress	Estimated	100.00%			
	(%)	Actual	100.00%			
	Amount	Estimated	815,800			
Total	used	Actual	815,800			
10tal	Progress	Estimated	100.00%			
	(%)	Actual	100.00%			

### (2) Evaluation of implementation effects:

### a. Investment

The Company raised a total amount of NT\$815,800 thousand for private placement, with NT\$700,000 thousand of the funds allocated to the cash capital increase of Unikorn Semiconductor Corporation. After completing the investment in November 2022, the shareholding ratio was 42.06%, which was used to pay for the financial requirements of the daily operation and capital expenses of the said invested company. The Company's production base is located in California, U.S.A., which mainly produces 4-inch wafers. GCS has invested in R&D for years and accumulated related III-V compound semiconductor processing technology. In consideration of the business potential for third-generation semiconductor applications, and after customer products enter mass production, producing standardized products in mass production using 6-inch wafer foundry becomes a competitive advantage. After evaluating factors such as productivity, production costs, related capital expenditure, and geopolitics, the Company decided to acquire the 6-in capacity through collaboration. Unikorn Semiconductor Corporation (the company established after separation from Epistar Corporation) is a company mainly providing 4-inch and 6-inch epitaxy and chip-related advanced processing foundry services. For this reason, GCS conducted strategic cooperation with Unikorn Semiconductor Corporation via investment. Through technological transfer, GCS conducted input production of customer products at the 6-inch wafer foundry of Unikorn

Semiconductor Corporation. This strategic cooperation not only acquires stable 6-inch wafer foundry services but also develops the productivity of the contracted supplier and reduces the production costs, thereby boosting its market competitiveness. Customers are also provided with the production bases of different regions as an enhancement of service marketing. For this reason, Unikorn Semiconductor Corporation continues to provide RF wafer foundry services in recent years and contributes to the RF foundry revenue of the company. Hence, the benefit of such private placement is manifesting.

# b. Enhancement of working capital

	Year	2021Q3	2021
		(Before the	(After the capital
Item		capital increase)	increase)
	Debt ratio (%)	12.25	8.22
Financial structure	Long-term fund to property, plant and equipment ratio (%)	531.09	824.88
	Current ratio (%)	815.78	1,543.02
Salvanav	Quick ratio (%)	633.37	1,342.15
Solvency	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.

After conducting a cash capital increase in the fourth quarter of 2021, the Company's debt ratio decreased from 12.25% to 8.22%, 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.

#### **Four. 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	20	23	2024		
Main products	Amount	Ratio (%)	Amount	Ratio (%)	
RF device wafer foundry	570,325	42.23	446,583	25.52	
Optoelectronic device wafer foundry	237,212	17.56	182,587	10.43	
KGD-brand optoelectronic products	535,579	39.66	1,076,886	61.54	
Technical service revenue (Note)	7,488	0.55	43,988	2.51	
Total	1,350,604	100.00	1,750,044	100.00	

Note: Technical service revenue includes royalty revenue and NRE revenue.

# 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 needs 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, 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 wafer foundry, which are mainly used in the radio frequency circuits of wireless communication products, especially in the high-end radio frequency devices(such as Power amplifiers and filters) 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, Lasor 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 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, 2025, and held 20.51% 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.
- (2) 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, 2025, 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 devices wafer foundry

- The 0.15μm GaN/SiC HEMT technology applied to mmWave high power amplifiers.
- The 802.11ax, WiFi 6, WiFi 6E, Wifi 7 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, Wifi 7, mobile phones and base station, and the highperformance 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.
- Third-generation Gallium nitride (GaN) High electron mobility transistor (HEMT) processing.

- Second-generation AlN and ScAlN bulk acoustic wave resonator technology for use by high-performance wideband filter up to 12GHz.
- Developed third-generation bulk acoustic wave resonator technology for use by high-performance RF filter up to 20GHz.
- Developed 0.15um GaN on Si HEM process technology for application in multifunction Monolithic Microwave Integrated Circuit (MMIC) power amplifiers and for use by wireless communication, radar, and satellite communication systems up to 30 GHz.
- Developed advanced InP HBT process technology for application in 6G power amplifiers, fiber-optic communication laser amplifiers, and Trans-Impedance Amplifier (TIA).

# (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 100G Baud 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 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.
- 70mW and 100mW Continuous Wave Lasers: Due to the continuous demand and specification upgrade for the high-speed transmission of AI and data center, the conventional optical transmission modules consume more power in data transmission, and thereby, the Silicon photonics module (CPO) is developed for relevant integration. SiPh process can integrate laser modulation, wave division, and other functions. Laser components mostly provide a light source, while CW laser components feature low noise, high stability, high power, long-term operation, relatively higher cost-effectiveness than EML, and other characteristics, that are more suitable for optical transmission modules with SiPh modules of short-distance transmission.

#### (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	Binary compound semiconductor	GaAs, InP, and GaN	High-speed communication devices and optoelectronic devices
element compound semiconductor	• 1	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.

Radio

Radio

Analog
Baseband

Baseband
Analog to Digital
Digital to Ananlog

Control
AID, DIA

Recieve

Power
Microphone
Speaker
Headset

Audio Godes

Pereferials

Camera
Bluetooth

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

Schneonductor Wateriar - Sincon				
	GaAs	GaN	Silicon	
Maximum frequency	2-300GHz, meet the	500MHz-100GHz	Below 30GHz	
range	long-distance			
	communication needs			
Maximum operating	150 degrees Celsius	220	degrees	
temperature			Celsius	
Electron mobility	High	Medium	Low	
Voltage withstand	Medium	High	Low	
capacility				
Radiation resistance	High	High	Low	
With light energy	Yes	Yes	No	
conversion properties				
Use at high frequencies	Low noise	Low noise	High noise, hard to	
			overcome	
Power consumption	Low	Low	High	
Component size	Small	Small	Large	
Component	High	High	Low	
performance (linearity,				
efficiency, and power				
density)				
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 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
M 1 1 D	MESFET-Metal-Semiconductor Field-Effect Transistor	Homogeneous structure, good linearity, good uniformity, mature, and mature and stable process
Molecular Beam Epitaxy (MBE)	pHEMT - Pseudomorphic High Electron Mobility Transistor	Heterostructure, high electron speed, high electronics gain, low noise, and high operating bandwidth
Metal-Organic	Low-level pHEMT - Pseudomorphic	Heterogeneous structure,
Chemical Vapor	High Electron Mobility Transistor	good linearity, good power
Deposition	HBT-Heterojunction Bipolar	amplification, and high
(MOCVD)	Transistor	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-Semiconduct 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.

With regards to the optical communication industry, the data transmission

technology using fiber optic and optical technology can be generally divided into categories of fiber optic materials (fiber optic, optical cable), components (photoelectric active components, photoelectric passive components), and optical communication equipment.

The fundamental operation approach of optical communication is to convert sound, image, data transmission, and other electrical signals into optical signals and transmit such signals via LD emitting elements (transceiver node) outward. The fiber optic is used as transmission media to the receiver node, then the PD receiver element restores received optical signals into electrical signals, which undergoes modulation to reproduce the sound, image, or data sent from the transceiver node, in order to complete the entire optical communication transmission procedure. Compared with a conventional electrical signal, an optical signal can provide fast and low-power transmission. For this reason, the telecommunication computer rooms worldwide, base stations, and data centers have eventually shifted from electrical transmission to optical transmission, which drives the fiber-optic internet and optical communication technology to undergo a total reform while increasing the demand for related components and the system market.

Optical communication plays a considerably important role in the field of artificial intelligence (AI). As AI technology develops quickly, and the demand for high-speed, low-latency, and high-performance data transmission continues to grow, optical communication technology coincidentally meets all these demands. In particular, optical transmission modules play the key role in optical communication technology, which converts electrical signals into optical signals and transmits via fiber optic, followed by converting optical signals back to electrical signals. Such a conversion process makes long-distance and high-speed transmission possible. The technological upgrade of optical transmission modules, such as SiPh technology and CPO technology, will further improve data transmission speed and efficiency, thereby meeting the requirements of AI and big data applications.

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

Indu	stry	Product items / Process	Domestic manufacturers	Foreign
		Technology	2 0.11.00010 111.011.001.001.010	manufacturers
Up-stream	Epitaxy PHEMT Up-stream PHEMT		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 (3μm, 2μm, 1μm) pHEMT (0.5μm, 0.25μm, 0.15μm) GaN HEMT (0.5μm, 0.25μm, 0.15μm)	Win Semiconductors Corp., Advanced Wireless Semiconductor Company, and Wavetek Microelectronics Corporation	Qorvo, GCS, and Wolfspeed
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
IDN	Ms	RF IC (From design, production, to package testing are performed internally)		Qorvo, Skyworks, etc.

(2) Optoelectronic device wafer foundry

	) - F	dome device water i	3	
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-	Package	TO-CAN	ELITE Advanced Laser	YSOD, PCL-KY,
stream	testing	COB	Corporation	etc.

(3) KGD-brand optoelectronic devices

Indi	Industry Product items / Process Technology Domestic manufacturers		Foreign manufacturers	
Up-stream	Epitaxy		Visual Photonics Epitaxy Co., Ltd (VPEC)	IQE and IET-KY
Mid- stream	Devices	Device design and	LuxNet Corp. and TRUELIGHT CORPORATION	GCS, M/A-COM, Lumentum, etc.

Industry		Product items / Process Technology	Domestic manufacturers	Foreign manufacturers
	Package testing		ELITE ADVANCED LASER CORPORATION	YSOD, PCL-KY, etc.
Down- stream	Module			XuChuang Opto- Electronic Co., Ltd. Hisense, etc.

The upstream/downstream relation of optical communication industries includes the suppliers of raw materials, component manufacturers, system integrators, and terminal users. The upstream mainly involves the supply of optical fiber, chemical components, and semiconductor materials; the midstream involves the manufacturing of optical transmission modules, fiber-optic cables, optical amplifiers, and other equipment; and the downstream involves telecom operators, data centers, corporate clients, and other terminal users.

The Company products comprise the upstream key components of optical transmission module, with emphasis on the R&D design and manufacturing production of photo laser (LD) and photo detector (PD) epitaxy using Indium phosphide (InP) and Gallium arsenide (GaAs) series as raw materials. The company's products are provided to clients with processing capacity in component processing, testing, and packaging. The completed components are used in the active components and transceiver/receiver modules of fiber-optic communication or consumer electronics products.

#### 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 and 5G 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 0.15µm 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.

Our company's newly developed second and third generation BAW technologies can be applied to filters with higher frequencies and wider bandwidths.

#### (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 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

Data	Company	GCS, USA	WIN	Wavetek	AWSC
Basic	Incorporation date	1997	1999	2010	1998
information	Stock capital	NT\$1.1 billion	NT\$4.2 billion	NT\$1.9 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
	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
	VCO InGaP HBT Voltage controlled oscillator	V	X	X	X
Technology	0.5 µm pHEMT Switch RF switch	V	V	Licensed from GCS, USA	Proprietary and licensed from GCS, USA
reclinology	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	Х
	0.15/0.25/0.5 μm GaN	V	V	X	X

Data	Company	GCS, USA	WIN	Wavetek	AWSC
amplifi stations	oltage, high power ers, 4G and 5G base s, satellite unications, defense				
40/100. Transir (TIA),	T communication /400 Gbps npedance amplifier Laser Modulation, and Amplifier	V	X	X	X
BAW f	ilter	V	X	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 manufacture optoelectronic devices only; however, the market size of optoelectronic devices 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 for RF and optoelectronic devices, 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

Yea Item	2024 (Note 1)	2025Q1 (Note 2)
R&D expense	230,139	58,663
Sales revenue	1,750,444	473,170
Ratio of R&D expense to Sales	13.15%	12.40%
revenue	13.1370	12.40/0

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

Note 2: It is the unaudited 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 Wide Tuning Range Varactor in mmWave phased array.					
2022	Application in 100G/Lane photodetectors for data centers and AI					
2022	Mass production of 100G/Lane InGaAs PIN photodetectors (100G/Lane InGaAs PIN PD)					
2023	The 0.1µm GaN/SiC HEMT used in millimeter-wave base stations and satellite communications					
2023	The high-linear GaN HEMT process used in 5G base stations					
2024	Development of 4-inch indium phosphide wafer for monolithic waveguide PIN PD + HBT transimpedance amplifier (TIA) integrated PIC process, applied in 400G optical communication					
2024	Development of 4-inch indium phosphide wafer for monolithic electro-absorption modulator (EAM) + HBT driver integrated PIC process, applied in 400G optical communication					
2025	Successfully developed 200G/Lane InGaAs PIN photodetector (200G/Lane InGaAs PIN PD)					

# (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.

#### 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 upstream 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 upstream 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. In particular, 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 (100G, 400G, 800G, & 1600G), based 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 0.1um or smaller process to expand the product application range.

- h. Actively develop transistor component design and process to be used for mobile phones and base stations.
- i. Develop Backside illuminated InGaAs PIN PD with integrated lens for 200Gbps/ 400Gbps/ 800Gbps/ 1600Gbps and higher-speed transmission products.
- j. Develop custom-made GaAs laser wafer proces.
- k. Develop custom-made 25Gbps PD/TIA wafer process: PIN PD/HBT integrated process.
- 1. Develop custom-made Electro-absorption Modulated Laser (EML) wafer process.
- m. Start the foundry production of 0.4um and 0.25um GaN/SiC and GaN/Si.
- n. Complete 0.25um GaN/Si process verification and customer product trial production.
- o. Assist customers to complete product verification with 0.15um GaN/SiC process.
- p. Assist customers in completing InP HBT product verification.
- q. Develop high-performance GaAs Schottky varactor diodes for Tuning-Range Phase Shifter and other applications.
- r. Develop 0.1/0.15um GaN HEMT process for mmW 5G base stations and mobile phone power amplifiers.
- s. Developing the third generation GaN HEMT process for use in communications and satellite aerospace applications operating at frequencies higher than 30 GHz, as well as in PA for defense.
- t. Assist customers in completing the validation of second-generation BAW filter products.
- u. Develop third-generation BAW filter process technology, applicable up to 20 GHz.

# 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 efficiency.
- 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.
- b. Establish strategic alliances with customers and upstream 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. Acquire manufacturing equipment in response to market demand and business expansion.

# 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) customer product 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. Develop Gen-3 BAW process technology and demonstrate its application to 20 GHz filters.

#### 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

Dagian	202	.3	2024		
Region	Sales amount	Sales ratio	Sales amount	Sales ratio	
USA	545,071	40.36%	473,750	27.07%	
China	554,022	41.02%	1,111,244	63.50%	
Taiwan	34,791	2.58%	41,358	2.36%	
Others	216,720	16.04%	123,692	7.07%	
Total	1,350,604	100.00%	1,750,044	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 of 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.

With regards to RF components foundry, since IoT relies on the RF modules to realize seamless equipment, equipment communication, and internet integration, the availability of related equipment is the key factor for pushing the growth of the RF component market. Following the increasing extension of IoT applications in medical healthcare, agriculture,

manufacturing, and urban development, the demand for RF modules with lower power consumption and high performance also increases. Moreover, the integration of IoT and 5G internet further drives the demand for RF components, whereas high-band and low-latency solutions are necessary for the substantial growth in the data traffic promoted by the fast expansion of 5G service management. The manufacturers are trying to cope with this demand through the development of compact and energy-saving RF components supporting advanced signal processing and low latency, thereby advocating the development of a global IoT ecosystem.

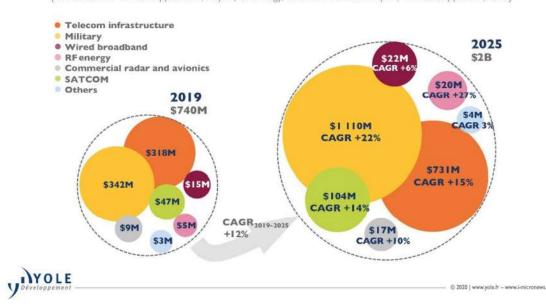
The telecommunication industry will continue to be the main driving force for the RF component market. The continuous deployment and increase in wideband service requirements of 5G infrastructure worldwide are the key factors driving the industry to grow. As the telecommunication industry continues to develop, the demand for high-performance RF solutions supporting reliable connection, network expansion, and enhanced data transmission speed are still highly important.

Additionally, according to the Global Information report, it is estimated that the global 5G market scale will be US\$32.74 billion in 2025 and reach US\$71.17 billion by 2030, with a CAGR of 16.8%. According to the research report released by Research Nester, the 2024 RF component market scale was US\$41.69 billion and will reach US\$211.36 billion by 2037, with a CAGR of 13.3%. The 2023 global market value of telecommunication equipment was approximately US\$714.32 billion and is estimated to grow by a robust growth rate of over 4.34% during the 2024-2032 forecast period. Due to the expansion of cell towers, the demand for 5G internet and investment in network infrastructure increases accordingly. Moreover, the continuous increase in mobile phone users and the global expansion of network users greatly drive the demand for wireless access points. Driven by low internet speed, digitalization, and demand for high-band communication, the wide use of fiber-optic cable further promotes market development.

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)



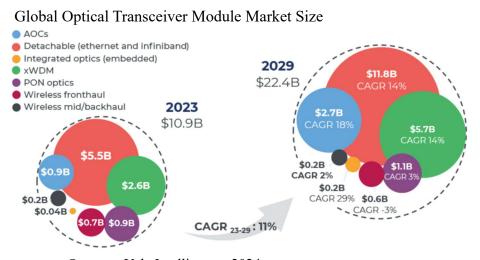
Data sources: Yole (2020)

Win Semiconductors Corp. and Advanced Wireless Semiconductor Company, both 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 have 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 need 5~7 PA chips. According to the estimation of Strategy Analytics, 5G mobile phones 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 a 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, 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.

Additionally, with regards to the optical communication industry, the Yole industry survey report shows that the global optical transmission module market scale will grow from US\$10.9 billion in 2023 to US\$22.4 billion in 2029, with a CAGR of approximately 11%. The optical transmission module market is mainly divided into the telecommunication market and the data center market. In particular, the growth of the data center market is relatively high, between 15% and 20%.

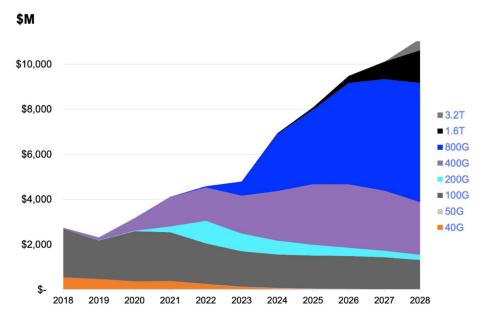


Source: Yole Intelligence, 2024

DeepSeek and CSP are AI software companies that jointly push for the availability of AI applications. The future big data will be generated at the edge, which means that factories, wireless base stations, and other fields require the deployment of massive micro-data centers and intensive deployment of optical transmission modules. It is expected that the quantity of optical communication nodes in every factory will increase by 3 to 5 times that of conventional architecture. Compared with conventional electrical signal transmission, fiber-optic communication comes with higher bandwidth, lower latency, and lower signal attenuation, which can meet the rigorous demand for high-performance data transmission with AI servers. This will turn optical communication technology into the indispensable key

of AI servers. The demand for AI servers will continue to drive the growing force of 800Gbps and 1.6Tbps. The conventional servers will also drive the demand for 400Gbps/800 Gbps/1.6T optical transmission modules following the update in specification.

Optical transmission modules serve as the key components for interconnection between data centers. Following the fast development of AI technology, the demand for high-speed, low-latency, and high-performance data transmission also increases, while the application of optical transmission modules becomes increasingly critical. According to the statistics compiled by TrendForce, the global shipment of optical transmission modules of 400G or higher was 6.4 million sets in 2023 and approximately 20.4 million sets in 2024, which is estimated to surpass 31.9 million sets by 2025, with a CAGR of 56.5%. As the demand for global data centers for high-speed computing and internet connection technology grows rapidly, 800G and 1.6T technologies will eventually become the core of next-generation internet infrastructure.



Source: LightCounting, Internal Estimates

Looking ahead, the Company will continue to enhance its technologies, develop new products and customers, increase revenue, and control operating costs and expenses, thereby improving profitability through enhanced operational performance.

#### (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 a single PD chip but also an 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. Compared with 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 the capacity of scale because small and medium production lots are not suitable for mass production in a 6-inch fab. 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 devices 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 applications, the Company's production can achieve 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 based 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 a 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. In addition, the growing demand for high-speed data transmission driven by AI and data centers has increased the demand for products used in data centers, which in turn accelerates the growth of the optical communication industry. This is to the advantage of the Company in its future development.

#### b. 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, InP, and BAW filter process technologies for the good of the existing customers, and to attract more new customers in order to diversify the distribution of the Company's customer base.

In the field of RF devices, for pHEMT and GaN, the Company, in addition to the existing  $0.5\mu m$  and  $0.15\mu m$  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.

c. Technological Accumulation and Integrity of Optical Communication Products

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, and 800 Gbps photodetector product lines, the Company is developing photodetectors with higher transmission speed (400G/Lane) and other components such as CW Laser, to provide a Complete Optical Chipset.

The Company steadily sold products applied in data center for many years and accumulated extensive experience and reliable quality assurance to provide industry-leading technology and solutions based on customer needs.

#### 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 or partner manufacturers 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 costs is higher than the operations 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 or partner manufacturers 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 produce by cooperating with other factories in the future, and reserve part of the 4-inch production capacity for the production of optoelectronic and other products with special applications.

# 2. Intended use and production processes of the main products

(1) Intended use of the main products:

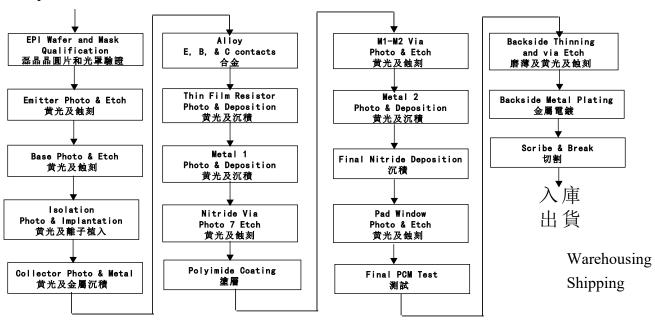
T1- 1	December 2015	T , 1 1TT				
Technical name	Process name	Intended Use Power Amplifiers required for				
	Power HBT	Handset/WLAN/WiMAX Mobile Power				
GaAs	1 OWEI 11B1	Amplifier, and Infrastructure Power Amplifier				
HBT	HBV and HBT	RF Infrastructure High Power Amplifier				
	VCO and HBT	Low Phase Noise VCOs for RF Infrastructure				
	v CO and HB1	Switches required for Handset/WLAN/WiMAX				
	0.5 μm Switch pHEMT	RF Switches				
	0.5 μm 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				
GaAs	0.25 μm 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				
рНЕМТ	0.15 μm 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 μm HFET	High Linearity Power Amplifiers required for RF Infrastructure				
	0.5 μm E/D-mod pHEMT	For Integrated Multifunction ICs				
	0.25 μm Super Low	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				
		5G mmWave power amplifier for high linearity and high performance				
InP DHBT	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 μm HEMT 0.5/0.25 μm GaN/SiC	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. High Power and High Voltage Power Amplifier for				
	HEMTs	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 nanophotodiode s 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	Hor 31) I 11) A R self-driving car and intrared		
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:

		2023			2024			
			Ratio to				Ratio to	
Item			net	Relation			net	Relation
Helli	Name	Amount	purchase	with the	Name	Amount	purchase	with the
			amount	issuer			amount	issuer
			(%)				(%)	
1	Company V	96,615	25.92	None	Company N	142,809	35.23	None
2	Company N	89,702	24.07	None	Company V	94,089	23.21	None
3	Company A	59,919	16.08	None	Company D	52,066	12.85	None
4	Company D	49,639	13.32	None	Others	116,352	28.71	None
5	Others	76,823	20.61					_
	Net purchase	272 (00	100.00		Net purchase	405 216	100.00	
	amount	372,698	100.00		amount	405,316	100.00	

#### Reason for increase or decrease:

- 1. Due to increasing production demand for optical communication products, the Company increased purchases from Company N.
- 2. Due to decreasing demand for the raw materials provided by the supplier, the purchase amount from Company V has decreased compared to 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; %

	2023				2024			
Item	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	482,150	35.70	None	Company E	1,012,965	57.88	None
2	Company M	221,079	16.37	None	Others	737,079	42.12	None
3	Others	647,375	47.93	_	_	_	_	_
	Net sales amount	1,350,604	100.00	_	Net sales amount	1,750,044	100.00	_

#### Reason for increase or decrease:

- 1. Due to the increasing demand for optical communication products, more KGD products were sold and resulted in higer revenue.
- 2. Because the infrastructure market demand had not yet recovered to result in the decrease in sales orders, the sales revenue from Company M has

#### decreased.

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		2023	2024	As of April 7, 2025
N. 1 C	Indirect employee	116	114	114
Number of	Direct employee	66	42	44
employees	Total	182	156	158
Average age		49.32	52.32	50.24
Av	Average seniority		11.1	11.06
Education distribution ratio (%)	Ph.D.	13.19	12.18	12.66
	Master	11.54	8.33	9.49
	Bachelor	32.97	40.39	38.61
	High school and below	42.30	39.1	39.24

#### 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 complete training and advanced study channels.

#### (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, 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 Technology 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.
- 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 endpoint protection 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	Counterparty	Contract duration	Main contents	Restrictive clause
contract				
Technology	Company F	11/22/2010 –	HBT and pHEMT	The transferred company
transfer		royalty paid in full	technology transfer	cannot use this
				technology to produce
				RF infrastructure
				products - NDA
Financing	CTBC Bank	8/6/2015 —	Long-term loan contract	Set up a pledge with
contract	Corp. (USA)	8/6/2031 (Note)		land and factory
				buildings
Technology	Shanghai	According to the	Specific technology	According to the
transfer	Galasemi	contract	transfer	contract
	Co., Ltd.			
Technology	Company L	According to the	According to the contract	According to the
Cooperation		contract		contract
and Supply				
Agreement				

Note: 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.

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

#### I. Financial analysis

Unit: NT\$ Thousands

Omt. 1v19 Thousands						
			Diffe	rence		
Fiscal Year	2023/12/31	2024/12/21	Increased			
Item	2023/12/31	2024/12/31	(Decreased)	%		
			amount			
Current assets	1,037,457	1,437,762	400,305	38.59%		
Non-current financial	1,397	1,492	95	6.80%		
assets at a fair						
value through other						
comprehensive						
income						
Investments accounted	1,625,600	755,769	(869,831)	(53.51%)		
for using the equity						
method						
Property, plant and	730,219	1,099,453	369,234	50.56%		
equipment						
Right-of-use assets	15,280	6,526	(8,754)	(57.29%)		
Intangible assets	4,056	6,723	2,667	65.75%		
Other assets	176,329	198,000	21,671	12.29%		
Total assets	3,590,338	3,505,725	(84,613)	(2.36%)		
Current liabilities	515,935	202,752	(313,183)	(60.70%)		
Other liabilities	89,793	281,577	191,784	213.58%		
Total liabilities	605,728	484,329	(121,399)	(20.04%)		
Share capital	1,112,832	1,123,383	10,511	0.94%		
Capital surplus	2,673,180	1,958,874	(714,306)	(26.72%)		
Retained earnings	(785,415)	(236,986)	548,429	(69.83%)		
Other equity interest	(15,987)	176,125	192,112	(1,201.68%)		
Total equity	2,984,610	3,021,396	36,786	1.23%		

			Diffe	rence
Fiscal Year	2023/12/31	2024/12/31	Increased (Decreased)	%
item -			amount	

- (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):
  - 1. Current assets: This was mainly due to the increase in cash and cash equivalent, accounts receivable and other current assets.
  - 2. Investments accounted for using the equity method: This was mainly due to the sale of all investment in Unikorn Semiconductor Corporation and the recognition of related investment losses in this year.
  - 3. Property, plant and equipment: This was mainly due to the increase in machinery and equipment acquisition transactions this year.
  - 4. Current liabilities: This was mainly due to the decrease in the current portion within one year of long-term borrowing.
  - 5. Other liabilities: The increase in other liabilities was mainly due to the reclassification of long-term loan to cause the increase in long-term loan.
  - Capital surplus: The accumulated deficit was compensated by the Capital surplus in Y2024.
  - 7. Retained earnings: Because the accumulated deficit was compensated by the Capital surplus in Y2024. In addition, the decrease in net loss in this year.
  - 8. Other equity interest: It was mainly due to the changes in the conversion of the financial statements of foreign operating institutions.
- (II) The changes that occurred do not have a material impact on the financial position.

#### II. Financial performance

(I) Comparative analysis of financial performance

Unit: NT\$ Thousands

Fiscal Year Item	2023	2024	Increased (Decreased) amount	Change ratio (%)
Operating revenue	1,350,604	1,750,044	399,440	29.57%
Cost of operating revenue	1,113,345	1,087,036	(26,309)	(2.36%)
Gross profit	237,259	663,008	425,749	179.44%
Operating expenses	464,286	470,234	5,948	1.28%
Operating loss	(227,027)	192,774	419,801	(184.91%)
Non-operating expenses	(579,298)	(428,121)	151,177	(26.10%)

Fiscal Year Item	2023	2024	Increased (Decreased) amount	Change ratio (%)
Loss before income tax	(806,325)	(235,347)	570,978	(70.81%)
Income tax benefit	14,089	(1,639)	(15,728)	(111.63%)
Net loss	(792,236)	(236,986)	555,250	(70.09%)

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):

- 1. Sales revenue: Because AI development pushed the application demand in data center increase, more KGD products were sold in this year and sales revenue increased.
- 2. Gross profit: This was mainly due to the increase in sales quantity and revenue weight of KGD products with higher margin. In addition, the gain on the reversal of inventory write-downs and obsolescence losses was recognized in this year.
- 3. Operating income: The increase in sales revenue and gross profit resulted in the operating income in this year.
- 4. Non-operating expenses: The other income from government subsidy was recognized in this year. In addition, no impairment loss of intangible assets was recognized in this year. The decrease in non-operating expenses is mainly due to the abovementioned items.
- 5. Loss before income tax: The increase in sales revenue and gross profit resulted in the operating income in this year. In addition, the decrease in non-operating expenses also reduces the loss before income tax.
- 6. Income tax: The income tax expense was calculated and recognized in this year based on the tax rules and regulations.
- 7. Net loss: This is mainly due to the decrease in the Loss before income tax.

#### III. Cash Flow

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

Unit: NT\$ Thousands

Year	2023	2024	Increased	Change ratio	
Item	2023	2024	(Decreased) amount	(%)	
Operating activities	(66,899)	443,974	510,873	(763.65%)	
Investing activities	21,625	( 67,345 )	(88,970)	(411.42%)	
Financing activities	(52,785)	(158,532)	(105,747)	200.34%	

Analysis of the change in the increase (decrease) ratio:

#### 1. Operating activities:

The decreasing net losses and the better operation conditions caused the increase in cash inflow from operating activities in this year.

#### 2. Investing activities:

The increase in cash outflow from investing activities was mainly due to the increase in machinery and equipment acquisitions and time deposit.

3. Financing activities:

Year	2023	2024	Increased	Change ratio
Item	2023	2024	(Decreased) amount	(%)

The increase in cash outflow from financing activities this year is mainly due to repayment of part of long-term bank loan in this year.

- (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 (2025)

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 esting shore Investing activities	
576,516 (Note)	(18,094)	(290,657)	267,765	-	-

(Note) The balance of cash and cash equivalent

- 1. Analysis of changes in cash flow for the coming year:
  - (1) Operating activities: The stable growth in company operations resulted in the increase in material procurement and funds for normal operation use.
  - (2) Investing activities: The company will adjust the production and sales operation plan based on the global economic environment, business cycle and customer needs. In addition, the company will evaluate the timing to acquire machinery and equipment in terms of future product trends.
  - (3) Financing activities: Repayment of bank loan and employee stock option exercise.
- 2. Corrective measures for insufficient cash and liquidity analysis:

The operation scale of the company is expected to expand in the future. If the funds level is not sufficient to support the operational needs, the company will consider funds raising or bank loan to cover the needs.

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

The company will evaluate the timing to acquire machinery and equipment based on the overall economic environment, operation development, the outlook of the optical communication industry and customer demands to improve production efficiency and capacity to raise the revenue and profit of the company.

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

#### (I) investment policy:

The investee companies are in the same industry for the purpose of expanding the operation scale.

- (II) The main reasons for investment profits or losses and improvement plan for the most recent year:
  - 1. The investee company of GCS Holding, Inc. Unikorn Semiconductor Corporation, has made significant progress in capacity enhancement, process improvement, and customer development, resulting in gradually increasing revenue. However, due to market factors, demand for related consumer electronic products has slowed down, leading to a reduction in customer orders and delays in the development of some products. As a result, research and development expenses and costs remain high, and the order volume has not yet reached an economic scale, resulting in continued losses. Because Unikorn Semiconductor Corporation considered adjusting its future operation plan and focusing on the development in optoelectronics area, the company decided to sell all shareholdings in Unikorn to Epistar Corporation in August 2024.
  - 2. The investee company of GCS Holding, Inc. Changzhou Chemsemi Co., Ltd. completed plant expansion in 2023. To expand the capacity and meet the demand for new plants, the Company continues to purchase machinery equipment and hire a labor force, which results in a substantial increase in relevant production costs, expenses, and expenditures. In spite of the growth in operating revenue of Changzhou Chemsemi, the orders have not reached the economic scale and hence incurred losses. For this reason, the company recognized investment loss. In the future, Changzhou Chemsemi will try to expand the sources of clients, control expenditures and enhance the production utilization rate to meet the

expected investment benefits. In terms of the tension trade relationship between US and China and the uncertain economic recovery in China, the company will continuously look for potential investors to sell the investment in Changzhou Chemsemi and decrease the shareholding to reduce the investment losses recognition and improve financial structure.

- 3. The investee company of GCS Holding, Inc. Shanghai Galasemi was established in December 2020 and started taking orders for sales. Due to the growth in revenue and gross profits, Shanghai Galasemi has generated profits from its current operation. In the future, Shanghai Galasemi will continue to expand its sources of customers, improve revenue and effectively control expenditures to increase its profits.
- (III) Investment plans for the coming year: None.

#### 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 rates

The interest income in the Company's 2024 and 2023 consolidated financial reports was NT\$13,609 thousand and NT\$3,180 thousand, respectively, which is 0.78% and 0.24% of the net operating revenue each year which was relatively low. In addition, the interest expense in the Company's 2024 and 2023 consolidated financial reports were NT\$11,405 thousand and NT\$17,568 thousand, respectively, which is 0.65% and 1.30% of the net operating income each year which was relatively low. Therefore, changes in interest rates would not have 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 in 2024 and 2023 were NT\$ 3,599 thousand and NT\$3,483 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 the reference for foreign exchange transactions. 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 a 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 profits and losses in the past have 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 operations with 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 and the Company's subsidiaries have lending funds limited to its 100% owned subsidiaries as of the annual report publication date.
- 2. Endorsements and guarantees: The Company 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 "Four. Operation Overview." The Company's R&D expenses in 2024 and 2023 were NT\$230,139 thousand and NT\$246,043 thousand, respectively, accounted for 13.15% and 18.22% of the net operating revenue of each year, respectively. The R&D expenses that are going to be invested in approximately accounted for 11%-18% of the net operating revenue in 2025.

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 are 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 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 35.23 % and 25.92% of the Company's purchase of raw materials in 2024 and 2023, 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 choose 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 is 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 downstream packaging factories or module manufacturers. The largest customer accounted for 57.88 % and 35.70 % of the Company's sales in 2024 and 2023, 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 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 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 rights 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 to cultivate 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 circumstances, the Company is committed to improving the 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 or 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 on their investment decisions on such information.

# ②Forward-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," "maybe," "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 forwardlooking statement involves known and unknown risks and uncertainties.

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 100-102 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 effects on the Company's business, operating results, and financial conditions.

VII. Other important matters: None

#### Six. Special disclosures

- I. Information on affiliates
- (I) Affiliated enterprise' organization chart

December 31, 2024

GCS Device Technologies Co., Ltd.

Incorporation date: April 2015

Place of registration: Taiwan

Net Worth: 32,366 thousands

GCS Holdings, Inc.
Incorporation date: November 2010
Place of registration: Cayman Islands
Net Worth: 3,021,396 thousands

100% 100%

Global Communication Semiconductors, LLC

Incorporation date: August 1997 (Note 1)

Place of registration: USA

Net Worth: 1.363.284 thousands

100%

D-Tech Optoelectronics, Inc.

Incorporation date: November 2007 (Note 2)

Place of registration: USA

Net Worth: 26,478 thousands

100%

D-TECH Optoelectronics (Taiwan) Corporation

Incorporation date: May 2010 (Note 2)

Place of registration: Taiwan

Net Worth: 1,467 thousands

Data source: The 2024 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. The company resolved to dissolve and liquidate our subsidiary, D-TECH Optoelectronics (Taiwan) Corporation, by a board decision on November 1, 2022. We received approval for the dissolution registration from the local authorities on December 22, 2023. The Company obtained the dissolution registration letter approved by the authority on December 22, 2023 and obtained

the liquidation completion letter issued by the court on November 21, 2024. The liquidation process has not yet been completed as of the annual report publication date.

#### (II) Affiliated enterprises' information

December 31, 2024

Unit: Thousands

			Eauity I	nvestment	Accounting
Reinvested	Main business	investment	Number	Ownership	Policies
business	activities	amoun	of shares	(%)	
	1. Manufacturing of	600,250	(Note)	100%	Equity
	compound	,			method
	semiconductor				
	wafers and foundry				
	related services as				
	well as granting				
	royalty rights for				
GCS USA	intellectual				
305 05/1	property				
	2. Manufacturing				
	and selling of				
	advanced				
	optoelectronics				
	technology				
	products				
GCS Device	Product design and	12,000	1,200,000	100%	Equity
Technologies, Co.,	research	12,000	1,200,000	10070	method
Ltd.	development				memod
Did.	services				
D-Tech	Developing,	393,380	360,000	100%	Equity
Optoelectronics,	manufacturing and	373,300	300,000	10070	method
Inc.	selling of				memod
inc.	photodiodes and				
	avalanche				
	photodiodes for				
	telecommunication				
	systems and data				
	communication				
	networks				
D-Tech	Manufacturing,	49,840	1,800,000	100%	Equity
Optoelectronics	retailing and	72,040	1,000,000	100/0	method
Optociectionies					memou
	wholesaling of				

(Taiwan)	telecommunication
Corporation	s devices, and
	manufacturing and
	wholesaling of
	electronic
	components

Note: GCS USA 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, 2024

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\$600,250 thousand	100%
GCS Device Technologies Co.,	Corporate director representative	Huang, Ta-Lun	The Company shareholding	100%
Ltd.	President	Yu, You-Chong	1,200,000 shares	
D-Tech	Director	Ann, Bau Hsing	GCS USA	100%
Optoelectronics, Inc.	President	Wu, Xiu-Cheng	shareholding 360,000 shares	
D-TECH Optoelectronics (Taiwan) Corporation (Note 2)	(Note 2)	(Note 2)	D-Tech Optoelectronics, Inc. shareholding 1,800,000 shares	100%

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

Note 2: The company resolved to dissolve and liquidate our subsidiary, D-TECH Optoelectronics (Taiwan) Corporation by board decision on November 1, 2022. We received approval for the dissolution registration from the local authorities on December 22, 2023. The Company obtained the dissolution registration letter approved by the local competent authority on December 22, 2023 and the liquidation completion letter issued by the court on November 21, 2024. The liquidation process has not yet been completed as of the annual report publication date.

#### (VI) Operational overview of each affiliated enterprise

Unit: NT\$ Thousands except paid-up capital; December 31, 2024

Company	Paid-up Capital (Thousands)	Total assets	Total liabilities	Net worth	Operating revenue	Operatin g profit (loss)	Profit (loss)	Earnings (losses) per share (NT\$)
GCS USA	USD 30,095	2,351,381	988,097	1,363,284	1,737,266	246,047	331,127	Note
GCS Device Technologie s Co., Ltd.	NT\$ 12,000	53,276	20,910	32,366	7,777	(957)	2,619	2.18
D-Tech Optoelectron ics, Inc.	USD 3,277	56,905	30,427	26,478	31,110	(5,199)	2,187	6.08
D-TECH Optoelectron ics (Taiwan) Corporation	NT\$ 18,000	1,467	-	1,467	-	(1)	(1,875)	(1.04)

Note: GCS USA 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 the Company's consolidated financial statements, which are consistent with those posted on the Market Observation Post System (MOPS).

MOPS link: https://doc.twse.com.tw/server-java/t57sb01?step=1&colorchg=1&seamon=&mtype=A&co\_id=4991&year=1 13

- (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:

Please refer to the Market Observation Post System (MOPS) for information regarding to the Company's private placement of securities.

MOPS link:https://mops.twse.com.tw/mops/#/web/t116sb01

#### III. 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

# 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.

- 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.
- 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 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.
- 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

#### Reasons for Differences

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.

#### Important matters concerning the protection Reasons for Differences of shareholders' equity 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. 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 The calculation of the meeting. shareholding period and number of shares held by shareholders is based on the shares held at the time of book-entry closing date. 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: (1) Election or discharge of directors and supervisors; (2) Alteration of the articles of association; (3) Reduction of capital; (4) Applying for the approval of ceasing its status as a public company; (5) Company dissolution, merger, share swap, and spin-off; (6) Entering into, amending, terminating any contract for lease of the company's business in whole, or for entrusted business, or for regular joint operation with others; (7) Transferring the whole or any essential part of the business or assets; another's (8) Acquiring whole business or assets, which having great impacts on the business

operation of the company;
(9) Issuance of equity-linked securities through private placement;

#### Important matters concerning the protection Reasons for Differences of shareholders' equity (10)Permission for director's engaging in any business within the scope of the company's business; (11)Distribution of dividends and bonuses in whole or in part with new shares issued: (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. The company shall prepare the general Regarding the release of the general meeting meeting Handbook, and release the same 21 Handbook and other meeting-related materials, according to article 20.4 of the days before the annual general meeting or 15 days before the extraordinary general issuer's articles of association, the board of meeting along with other meeting related directors shall prepare the general meeting materials. 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

accordance with the regulations of public companies. The aforementioned "regulations public company" includes "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

## Important matters concerning the protection of shareholders' equity

#### Reasons for Differences

concerning the protection of shareholders' equity."

- 1. When the company holds a general meeting, it shall adopt a method of exercise of voting rights by electronic means.
- 2. When voting rights are exercised by way of a written ballot or by electronic means, the 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.
- 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.
- 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.
- 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

For shareholders' exercising their voting rights by way of a written ballot or by electronic means, according explanations of the attorney in the Cayman Islands, regarding the provision shareholder exercising voting rights by way of a 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.

# Important matters concerning the protection of shareholders' equity

#### Reasons for Differences

- 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.
- 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.
- 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:
  - (1) The share(s) of a company that are held by the issuing company itself in accordance with the laws;
- (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.
- (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.

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

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

## Important matters concerning the protection of shareholders' equity

more of the attending shareholders who represent a majority of the total number of its outstanding shares:

- 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.
- 2. Alteration of the articles of association;
- 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.
- 4. Distribution of dividends and bonuses in whole or in part with new shares issued;
- Resolution of dissolution, merger, or spin-off;
- 6. Issuance of employee restricted shares;
- 7. Share swap.

#### Reasons for Differences

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

- 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:
  - (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 accordance with the Special Resolutions stipulated in the Company Act of the Cayman Islands. Therefore, resolution thresholds for making amendments tο 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 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 resolution passed by 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.

#### (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

Important matters concerning the protection
of shareholders' equity

#### Reasons for Differences

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 protection of shareholders' equity."

#### (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.

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 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

Important matters concerning the protection of shareholders' equity		Reasons for Differences
		should have limited impact on shareholders' equity.
2.	The term of office of a director shall not exceed three years; but he/she may be eligible for re-election.  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 the election of one candidate or may be split for the election of two or more candidates. The ballots received by a candidate represent a prevailing number of votes and shall be deemed a director-elect.  A director may be discharged at any time	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.
	by a resolution adopted at a general meeting.	
	elected by the general meeting, among them at least one supervisor shall have a domicile within the territory of the ROC. The term of office of a supervisor shall not exceed three years; but he/she may be eligible for re-election.	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.
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	
4.	new supervisors.  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	
5.	request the board of directors or managerial officers to make reports thereon.  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.	

### Important matters concerning the protection of shareholders' equity 6. To facilitate the performance of duties, Supervisors may appoint a certified conduct the auditing on their behalf.

## public accountant and attorney to 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, articles of association, or the resolutions of the shareholders meeting when carrying out their duties, the supervisors shall forthwith advise, by notice, to the Board of directors or the violating director, as the case may be, to cease such act.
- 8. The supervisor may each exercise the supervision power individually.
- 9. A supervisor shall not be concurrently a director, a managerial officer, or other staff/employee of the company.
- 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 Audit Committee or 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.
- 2. In case the Audit Committee or 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.
- 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.
- The director of a company shall 1. 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

#### Reasons for Differences

There is no corresponding concept of "supervisor" according to the laws of the Cayman Islands, but the Company has an Audit Committee. The issuer will propose to shareholders in 2025 annual general meeting to adopt revisions of article 5.2 of issuer's articles of association to comply with the "important matters concerning the protection of shareholders' equity" amended on May 13, 2024. That is, shareholder(s) who has/have been continuously holding 1% or more of the total number of the outstanding shares of the company for more than six consecutive months may request in writing that the Audit Committee to initiate, on behalf of the company, an action against a director. If the Audit Committee fails to initiate such action within 30 days after receiving the request, the shareholder(s) may initiate the action on behalf of the company.

Except for the fact that the laws of the Cayman Islands do not have a corresponding concept of "supervisor," and therefore the issuer's articles of association do not contain provisions on supervisors' liability for damages, article 47.2 of the articles of association complies with the "important

Important matters concerning the protection of shareholders' equity	Reasons for Differences	
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.  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.  3. The managerial officers and supervisors of the company shall bear the same responsibilities for damages as the directors of the company within the scope of performing their duties.	matters concerning the protection of shareholders' equity."	

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:None.



Representative: Ta-Lun (Darren) Huang

