V. Operational Highlights

1. Business Activities

1. Business Scope

1. Main Business Scope:

(1) CC01080 Electronic Parts and Components Manufacturing
(2) CC01101 Electronic Parts and Components Manufacturing
(3) CC01110 Computers and Computing Peripheral Equipment Manufacturing
(4) CC01120 Data Storage Media Manufacturing and Duplicating
(5) CC01990 Electrical Machinery, Supplies Manufacturing
(6) F119010 Wholesale of Electronic Materials
(7) F219010 Retail Sale of Electronic Materials
(8) H201010 Investment
(9) I301010 Software Design Services
(10) I501010 Product Designing
(11) JE01010 Rental and Leasing Business

2. Revenue Proportion：

Established in May 1997, the Company's primarily provides Integrated Circuit (IC) packaging and testing services. Revenue proportion as of 2021 is as followed：

Unit：NT 1,000s

Items	Net Revenue 2021	Revenue Proportion
Packaging Service	53,334,463	63.65%
Testing Service	12,708,536	15.17%
Module Service	7,675,143	9.16%
Wafer Level Packaging	4,260,983	5.08%
Wafer Level Testing	5,742,084	6.85%
Others	72,363	0.09%
Total	83,793,572	100.00%

3.Current Product/Services：

(1)High Pin-count Thin Small Outline Package (TSOP) packaging and testing services
(2)Quad Flat No-leads (QFN) Packaging Services
(3)Multi-Chip Packaging (MCP, S-MCP) Packaging and Testing Services
(4)Ball Grid Array (wBGA, FBGA) IC packaging and testing services
(5)Secured Digital Memory Card (SD, microSD)，USB packaging and testing services
(6)Solid State Drive(SSD)、Embedded Memory (eMMC, eMCP, UFS) packaging and testing services
(7)DRAM Chip-Stacking packaging and testing services
(8)Mobile memory packaging and testing services
(9)Wafer testing services
(10) Wafer bumping packaging services
(11) System-in-Package (SiP) packaging services
(12) Redistribution Layer (RDL) services
(13) Wafer Level Chip Scale Package (WLCSP) packaging services

(14) Package on Package / Package in Package (PoP, PiP) packaging and testing services
(15) CMOS Image Sensor (CIS)packaging and testing services
(16) Flip-Chip Packaging Services
(17) Copper Pillar Bump Flip Chip (Cu Pillar Bump Flip Chip) packaging services
(18) Electro Magnetic Interference (EMI) shield package packaging services
(19) Fan-Out Panel Level (FOPLP) packaging and testing services
(20) Module and System packaging services

4. Product/Service in Development：

(1) Developing ultra-fine RDL line and space 2/2um to provide high efficiency, I/O count, band width, and heterogeneous integration package technologies.
(2) Developing bumping technology use on Fan-out on substrate to provide performance competitiveness solution with 2.5D Si interposer solution.
(3) Continue to develop the Chip Last Fan-out architecture based on the combination of Flip Chip and Redistribution Layer technologies. The goal is to commence pilot production in early 2023 once customer validation is completed
(4) Continue to develop the Pillars in Fan-Out (PiFO®) process for smart phone, wearable device and other consumer product applications.
(5) We are currently working with a number of Top 5 international CMOS Image Sensor (CIS) customers by market share. Our cutting-edge Through Silicon Via (TSV) technology will help customers continue to expand their market share and technological leadership in the field.
(6) A number of domestic IC design houses are also seeking to leverage PTI's proprietary advanced TSV technology to become the leaders of the CIS market; At least three well-known domestic design houses will engage in collaborative process development with us this year.
(7) For the application of TSV to High Bandwidth Memory, at least two potential customers have opened talks with us this year to o discuss the specifications and technical capabilities; A number of products based on the application of advanced TSV technology to AI components are expected to enter development this year.
(8) Develop 3D stacked packaging based on the integration of logic IC, 4 HBM DRAM memory IC along with TSV and uBump bonding process to meet the requirements for high-performance, high-density, and high-bandwidth in AI, HPC and high-speed networking applications.
(9) Develop FOPLP stacked packaging that combines 8 NAND memory IC with Controller to meet the requirements for ultra-thin, high-density, and high-speed mobile communication applications.
(10) Developing testing and hardware solutions for high speed 3D NAND (2.4 Gbps) product
(11) Developing Storage Class Memory (SCM)2.92 Gbps services and hardware solutions
(12) Developing USF4.0 Automotive product testing services and hardware solutions
(13) Development of Tester IO board hardware

2. Industry Summary

1. Current Industry Status & Outlook

Global trade and economy underwent a tremendous upheaval over the past two years. For the semiconductor industry, the shift to working and learning from home due to COVID-19 generated tremendous business opportunities for the electronics industry. The coming of 5G

also brought many new emerging applications such as electric vehicles, self-driving vehicles, cloud servers, IoT, satellite and e-healthcare. The veritable explosion of applications has created a golden period of growth that the industry has not seen in thirty years. IMF forecasts suggest that global economic growth will reach up to 5.5% in 2021.

For 2022, some people are voicing a more conservative outlook after two years of global growth. IMF data from January 2022 suggested that global economic growth in 2022 will be slightly lower than that of 2021 at 4.4%. The Russian-Ukraine war that broke out in February is expected to impact on the global economy as well.

For the semiconductor industry, 2021 global chip sales published by the Semiconductor Industry Association (SIA) reached a record-breaking US$555.9 billion, representing a 26.2% jump over 2020. Growth is expected to maintain its momentum in 2022. Year-on-year growth won't be as eye-catching as last year (2021) however with sales growth projected to reach 8.8%.

The Taiwanese semiconductor industry has outperformed the global average. According to the International Strategy Center of Industrial Technology Research Institute (ITRI), the total output of the Taiwanese semiconductor industry reached NT$4.08 trillion in 2021 and grew by 26.7% year-on-year. Memory semiconductor products saw the most growth and exceeded 50% year-on-year. The IC manufacturing industry continued to be the biggest sector by value. Total value approached NT$2.23 trillion with foundries accounting for NT$1.94 trillion. The Taiwanese semiconductor can expect continued growth in 2022 with total output approaching NT$4.8 trillion.

In the long-term, the semiconductor market can expect continued growth over the next few years thanks to demand from new applications. Semiconductors have a wide range of applications including smart phones, computers, cloud servers, AI, AR/VR, 5G, electric and self-driving vehicles, IoT, and e-healthcare. Some people expect semiconductors to become as vital as water and oxygen to mankind, and this may very well be true.

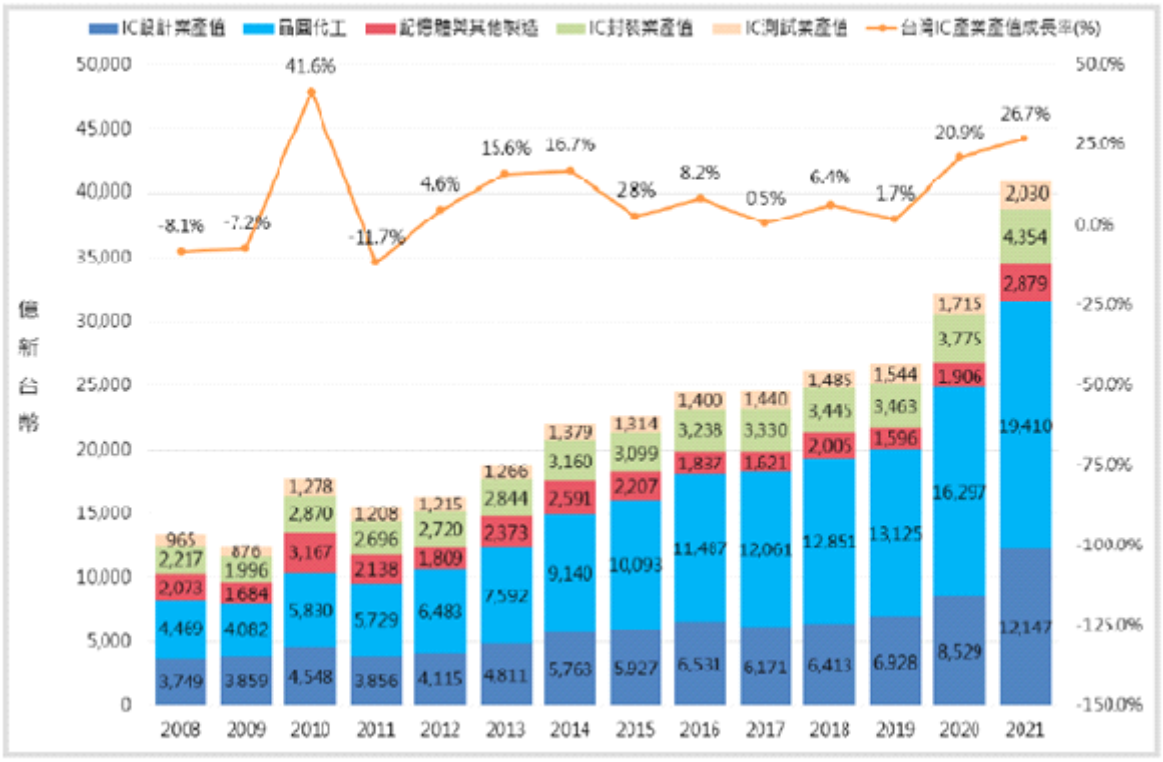
2017-2021 Taiwan IC Industry Value

Unit：NT $billions

In NTD M	2017	YoY	2018	YoY	2019	YoY	2020	YoY	2021	YoY
IC Industry value	2,462.3	0.5%	2,619.9	6.46%	2,665.6	1.7%	3,222.2	20.9%	4,082.0	26.7%
IC Design	617.1	-5.5%	641.3	3.9%	692.8	8.0%	852.9	23.1%	1214.7	42.4%
IC Manufacturing	1,368.2	2.7%	1,485.6	8.6%	1,472.1	-0.9%	1,820.3	23.7%	2,228.9	22.4%
Wafer Foundries	1,206.1	5.0%	1,285.1	6.6%	1,312.5	2.1%	1,629.7	24.2%	1,941.0	19.1%
Memory & Other	162.1	-11.8%	200.5	23.7%	159.6	-20.4%	190.6	19.4%	287.9	51.0%
IC Packaging	333.0	2.8%	344.5	3.5%	346.3	0.5%	377.5	9.0%	435.4	15.3%
IC Testing	144.0	2.9%	148.5	3.1%	154.4	4.0%	171.5	11.1%	203.0	18.4%
IC Product Value	779.2	-6.9%	841.8	8.0%	852.4	1.3%	1043.5	22.4%	1502.6	44.0%
Overall Global Semiconductor Value (US$ B)/YoY	4,122	21.6%	4,688	13.7%	4,123	-12.0%	4,404	6.8%	5,559	26.2%

Source：Industrial Technology Research Institute

Taiwan Semiconductor Revenue by Sector



Source：Industrial Technology Research Institute

2. Industry Supply Chain

Sectors in IC industry can be categorized according to position in production process, including IC Design at the upstream, IC Manufacturing & Foundries at the mid-stream and IC Assembly & Testing sector at the downstream.

(1) Upstream IC Design:

IC Design Sector includes companies designing IC products. The sector is knowledge-intensive with high entrance barrier and return on investment. Its main business scope includes designing and sales of own products or customized design for customers.

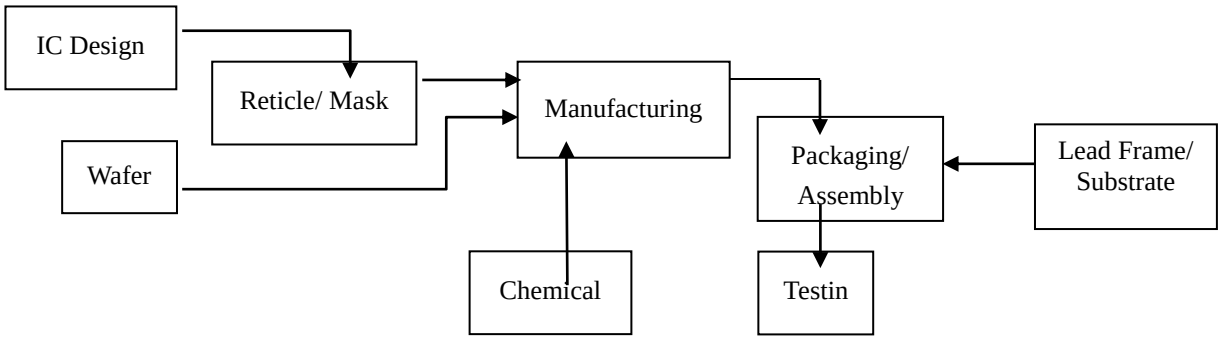
(2) Mid-stream IC Manufacturing:

Include IC manufacturing sector and related chemical suppliers. Its main business scope involves manufacturing wafer with precision tools according to in IC circuits designed in house or specified by customers. This sector is capital and technology intensive with high entrance barrier

(3) Downstream Assembly and Testing:

Outsource Assembly and Testing (OSAT) sector provides cutting, packaging, assembly and testing service to manufactured IC wafer for final product application.

IC Industry Supply Chain as illustrated below



In recent years' scope of IC manufacturing as well as assembly and testing continues overlap due to increasing market demand for larger quantity and higher quality IC. In addition to higher performance and smaller profile, IC is also required to satisfy demands for integrated functions. As a result, some wafer foundries begin to develop products and services that extends into scope of IC packaging and assembly. Majority of wafer foundries choose to work closely with cooperating assembly and testing service providers. Integrated Design and Manufacturers (IDM) also collaborate with OSAT service providers in designing and developing product solutions.

3. Trend of Product Development and Competition

(1) Trend of Product Development

Trends in semiconductor development include multi-function, enhanced performance, energy-efficiency, thermal dissipation, and a high level of integration. These are spurring the push towards advanced packaging technologies such as System in Package (SiP) and Heterogeneous Integration. New types of advanced packaging technologies such as Panel Fan-out, TSV, Embedded Package, Thin Wafer, Chip Stacking, Fine Pitch Flipchip, High Density Encapsulation, Antenna in Package (AiP), High Density SMT, as well as the integration of System Assembly and Testing technologies will be the next critical juncture for the semiconductor industry in the post-Moore's Law age.

Future products will inevitably require the integration of different advanced packaging and testing technologies. PTI has for many years focused on continuous R&D of technologies to meet the needs of new product types. Having a detailed of the latest product trends means PTI can launch technologies essential to the market at the optimum point in time.

The semiconductor industry is set for several years of continued growth. PTI will continue to develop innovative packaging and testing technologies to maintain our technological leadership in the global OSAT sector. At the same time, quality and production yields will be emphasized to provide the market and the industry with the different technologies required in each field. We aim to provide customers with the most competitive services in pursuit of joint growth.

(2)State of Competition：

A comprehensive back-end packaging and testing capability means that PTI is more than capable of providing semiconductor customers with everything from Bumping, Wafer Sort, WLCSP, Wire Bond Package, Flipchip Package, System in Package, Panel Fan-out,

3DIC TSV, System Assembly, to Final Test services.

Once the wafer emerges from the foundry, PTI can provide customers with a one-stop shop for all semiconductor back-end services instead of having to line up different production sites and schedules. The comprehensive semiconductor back-end services offered by PTI encompasses conventional product packaging & testing as well as mass production based on the latest technologies. These are some of the reasons why PTI is so competitive in the semiconductor back-end sector.

In addition, other PTI advantage include technical sophistication, short production cycle, high production yields, and low production costs. PTI is willing to share our strength with the customers. For more than two decades, we have made customers our top priority and shared our strengths with our customers so that we can grow together.

In the future, as the demand for advanced packaging technologies continues to grow, PTI will not only maintain our leadership in memory packaging and testing but also see large, sustained growth in our logic and SiP business. PTI is now a world-leader in total semiconductor packaging and testing services.

Revenue Annual Growth 2016-2021 of Taiwan OSAT Companies Ranking Among Global Top 10

Unit：NT million

Year/Company	2021	YoY%	2020	YoY%	2019	YoY%	2018	YoY%	2017	YoY%	2016
ASE Holding	569,997	19.5%	476,979	15.4%	413,182	4.0%	397,261	36.8%	290,441	5.7%	274,884
PTI	83,794	9.99%	76,181	14.5%	66,525	-2.2%	68,039	14.1%	59,632	23.4%	48,344
KYEC	33,759	16.58%	28,959	13.4%	25,539	22.7%	20,816	5.7%	19,686	-2.0%	20,081
Chipbond	27,082	21.58%	22,275	9.1%	20,419	9.0%	18,725	16.4%	18,428	6.8%	17,256
ChipMOS	27,400	19.07%	23,011	13.1%	20,338	10.0%	18,480	3.0%	17,941	-7.5%	19,392

Source：Market Observation Post System/ Relevant Financial Statements Organized by PTI

(3) Summary of Technological Research & Development

1.R&D Cost

Latest Annual R&D expenditure as followed

Unit：NT thousands

Item / Year	2021
R&D Expenditure	2,443,246

2. Successfully developed technology or product：

(1) Packaging Solution Achievements:

A. The method for using RDL first (chip last) for substrate and Fan-Out Panel Level Package (FOPLP) was successfully applied to the development of automotive SiP with embedded passive components and has now been fully validated by the customer.

B. FOPLP method based on RDL with Line/Space 3/3um RDL was successfully developed, validated and applied to high-performance computing IC.

C. SoC and High Bandwidth Memory HBM were successfully integrated through chip middle process for FOPLP. The technology can be used to meet the data processing and low-latency data transmission requirements of HPC/AI.

D. LED and control IC were successfully integrated through chip middle process for FOPLP. Applications include AR/VR devices used in entertainment, healthcare, and education.

E. Embedded die was successfully developed using chip middle process for FOPLP.

The process can be used to realize high-density heterogeneous integration of high-end mobile devices and HPC processors.

F. FOPLP products with bump free fan-out and multi-layer RDL can now be mass produced at a very competitive cost. Applications include packaging products for mobile devices, wearable devices, and consumer products.

G. Ultra-thin and high density stacked Bandwidth Memory (HBM) product was successfully developed using Through Silicon Via (TSV) packaging process.

H. TSV CIS CSP process for the mobile device, healthcare, security surveillance and automotive segments was successfully developed and is scheduled to start mass production in the second half of 2021.

I. Completed the development of Antenna in Package (AiP) technology. A Radio Frequency (RF) laboratory was also set up to help customers accelerate the development and validation of their 5G high-frequency packaged products.

J. Flip Chip BGA (FCBGA) for large IC is now ready for mass production. The process can be used to meet the demand for high-performance computing IC from data centers and servers.

(2) Testing Solution Achievements:

A. Testing services for WiFi 6E and BTC.

B. PCIe Gen4 system-level testing services and hardware development.

C. Testing and hardware development for High Density 3D-AND.

D. Testing and development of related hardware for Teradyne IP750 CIS.

E. Development of high-speed test board for Advantest T5503HS.

F. Development of Thin package COK.

G. Development of O/S test bench.

(4) Long-term and Short-term Business Strategy

Our Short-term and Long-term strategic business planning in management, production, sales & marketing and research & Development are outlined below

1. Short-term business planning

(1) Technological leadership is one of PTI's key business strategies. The diversification of semiconductor product applications is reflected in the packaging technologies they need as well. PTI will continue to develop new processes and technologies aimed at meeting the needs of the industry. An example of this is advanced packaging technology for CMOS Image Sensors (CIS). This is one of the products that PTI will be focusing on in the short-term.

(2) Continue to reduce production lead time in order to provide speedy service for customers.

Out main advantage lies in flexible production process offering high level of mobility. We will continue to reduce production lead time in order to provide speedy service for our customers.

(3) Continue to provide integrated Turn-Key services

Due to consideration in cost, up-stream wafer foundries continues to outsource IC assembly, packaging and testing to specialized assembly and testing facilities (OSAT). We are among the few companies capable of providing complete assembly, packaging and testing services in the country. In order to increase our competitive advantage in providing customer with more options and better service, we will continue to offer integrated Turn-Key services.

(4) Explore foreign and domestic market and increase market share

In addition to maintaining strong relationship with existing foreign and domestic customers, we will use our competitive advantage in flexible production process, high level of mobility and capability in proving Turn-Key services to develop new customer worldwide.

2. Long-Term Business Planning

(1) Emphasize long-term partnership with customer and supplier

Through emphasizing long-term collaboration with up-stream and down-stream partners, we aim to become the trusted OSAT service provider providing our customer reliable quality and service. We will also develop strong collaborative partnership with our suppliers

(2) Emphasis on long-term cooperation with suppliers

Our suppliers for semiconductor equipment and materials have been crucial to the growth of PTI over the years. The Company will therefore continue to strengthen and expand our cooperation with suppliers so that we can all grow and succeed together.

(3) Increase the level of production automation with an emphasis on smart factories to improve product yields and production efficiency.

(4) Continue to development next-generation packaging and testing technologies

PTI has always been on the cutting-edge of the industry in developing advanced packaging technologies that our customers need. The establishment of the packaging and testing R&D center in 2006 saw PTI become the industry leader in innovative R&D of new technology patents. The new technologies are then introduced into mass product at a suitable time and place. In the future, technology will continue to service as the foundation for sustained innovation. PTI will therefore continue to focus on the development of innovative technologies as well.

(5) Increase revenue contribution from Logic, Module(SSD) and Micro-electro-mechanical Systems(MEMS)

Through increasing customer and revenue in areas of Logic, Module (SSD) and (MEMS) we continue to diversify product risk and increase company scale.

2. Market and Product Sales Outlook

(1) Market Analysis

1. Primary area of product/service sales/provision

PTI primary business scope includes providing IC outsourced assembly and testing (OSAT) services in overseas as well as domestic market. As of 2021 revenue from domestic sales account for 23.10% of overall revenue while that of overseas markets account for 76.90%. PTI principle markets are located in Japan, Singapore, and North America.

Unit：NT Thousands

Year / Market	2020	%	2021	%
Domestic	15,347,846	20.15	19,356,303	23.10
Export	60,832,803	79.85	64,437,267	76.90
Japan	27,395,237		25,796,097	
Singapore	14,378,679		19,099,286	
North America	13,111,792		12,546,898	
Europe	2,281,902		2,314,953	
China and Hong Kong	1,085,555		2,002,639	
Others	2,579,638		2,677,396	
Total	76,180,649	100	83,793,572	100

2. Market Share：

A surge in demand in the global semiconductor market from all kinds of applications meant that almost all spare packaging and testing capacity was used up in 2021. Most OSATs experienced high growth as a result. Chip insight data placed PTI 4th out of the global top 10 in

packaging and testing revenues. PTI is continuing to grow at a steady pace.

3. Market Supply and Demand Outlook and Growth Potential

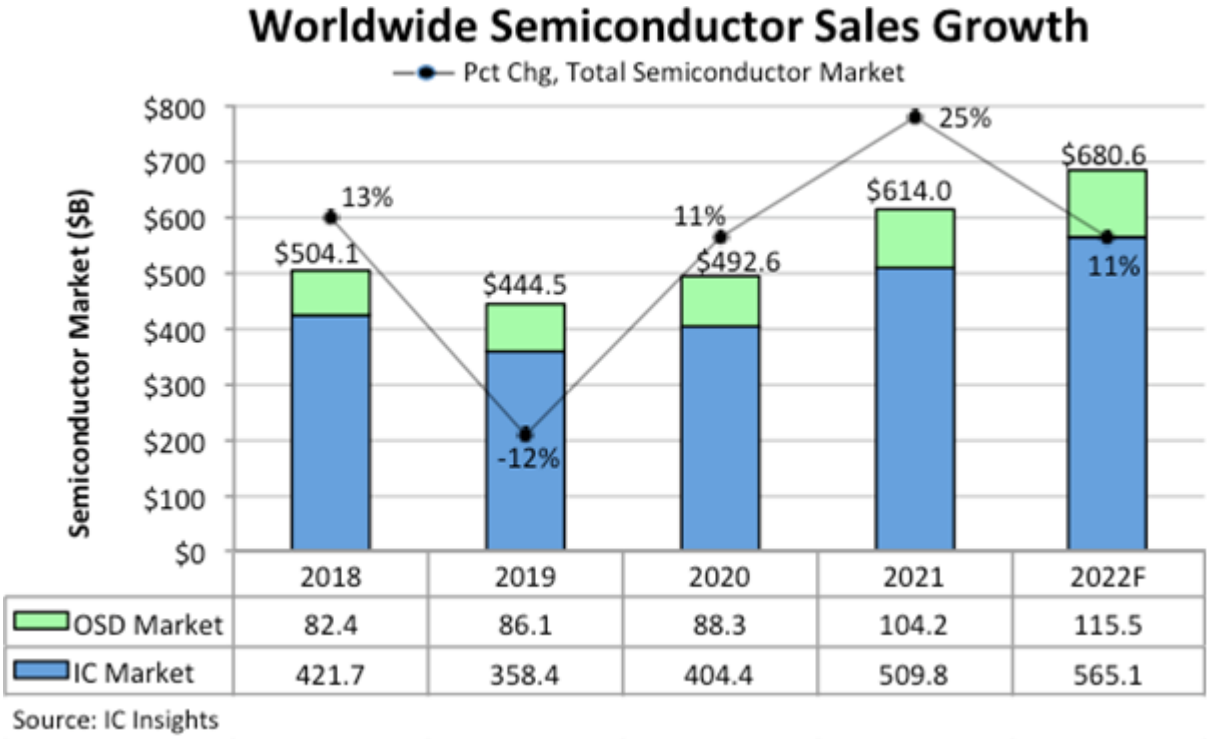
World Semiconductor Trade Statistics (WSTS) reported that the semiconductor market will grow by 8.8% in 2022 with sensors growing by 11.3%, analog IC growing by 11.1%, and logic IC growing by 6.2 – 8.8%. The research report published by research firm IC insight also expected total shipments of semiconductor products to grow by record-breaking 11% in 2022.

WSTS Global Semiconductor Market Forecast

Fall 2021	Amounts in US$M			Year on Year Growth in %		
	2020	2021	2022	2020	2021	2022
Americas	95,366	118,835	131,084	21.3	24.6	10.3
Europe	37,520	47,126	50,467	-5.8	25.6	7.1
Japan	36,471	43,581	47,621	1.3	19.5	9.3
Asia Pacific	271,032	343,419	372,317	5.1	26.7	8.4
Total World - $M	440,389	552,961	601,490	6.8	25.6	8.8
Discrete Semiconductors	23,804	30,100	32,280	-0.3	26.4	7.2
Optoelectronics	40,397	43,229	45,990	-2.8	7.0	6.4
Sensors	14,962	18,791	20,913	10.7	25.6	11.3
Integrated Circuits	361,226	460,841	502,307	8.4	27.6	9.0
Analog	55,658	72,842	79,249	3.2	30.9	8.8
Micro	69,678	79,102	83,980	4.9	13.5	6.2
Logic	118,408	150,736	167,396	11.1	27.3	11.1
Memory	117,482	158,161	171,682	10.4	34.6	8.5
Total Products - $M	440,389	552,961	601,490	6.8	25.6	8.8

Note: Numbers in the table are rounded to whole millions of dollars, which may cause totals by region and totals by product group to differ slightly.

Source：世界半導體貿易統計局（WSTS）



Source: IC Insights

4. Competitive Advantages

PTI have grown to become one of the major OSAT service providers, delivering high quality, dedicated service and advanced technology for our customers. We continue to collaborate closely and maintain solid relations with our customers. Our competitive advantages are as followed.

(1) Solid Strategic Allies and Globalization

The IC OSAT sector is characterized by high level of collaboration with upstream wafer foundries. Consequently, profitability of assembly, packaging and testing service providers relies on solid relationship with customers. In the meantime, IC manufactures also chose long-term partnership with assembly, packaging and testing service providers due to confidentiality in product technology, product quality and production process. Such strategic alliance with concrete relationship of collaboration is beneficial for long-term development of the company.

(2) Turn-key Service

In response to rapid decline in IC sales prices, we offer Turn-key Service to our customers, including both assembly and packaging, as well as testing in order to reducing cost and risk in shipping process.

(3) Outstanding capability in development and production

PTI have been committed in developing new technologies while investing heavily in technological research and production process improvement. We have been proudly awarded many domestic and international patents, as well as technology license from multiple major international manufacturers, establishing our solid competitive edge within the industry.

(4) Investment in high precision automated equipment

In response to development of IC product towards increasingly higher performance, pin-count and density we continue to invest in high precision automated equipment from well-known Japanese and US vendors in order to satisfy customer needs and continuously improve our quality of service.

(5) Online automated customer service system

Our online automated customer service systems enable customer to track closely product status, production progress, and any potential problems. This facilitates swift problem resolution and product improvement while increasing added value for customer.

5. Supporting and Hindering Factors and Responding Strategy

(1)Supporting Factors：

【Industry Background】

① Competitive Advantage of Taiwanese Semiconductor Industry

Taiwan semiconductor industry encompasses a complete semiconductor industry structure from upstream IC Design and wafer foundries to downstream OSAT service providers. This vertically integrated chain of supply, consistent with industry development, contributes to establish the strong competitive position of Taiwanese semiconductor sector in the global market. Booming IC industry facilitated by rapid global development in electronics, information technology, communication technology, consumer electronics, optoelectronic industry, Artificial Intelligence (AI) and Internet of Things (IoT) will continue to support stable growth in OSAT sector.

②OSAT Sector Benefitting from Major Integrated Device Manufacturer (IDM) Outsourcing Trend.

Due to high capital investment of advanced production process, global IDM manufacturers continue to increase its outsourcing of wafer manufacturing, assembly, packaging and testing to Asia region with lower production cost. Taiwan, with its

complete industry structure and dynamic vertical supply chain, is the most preferential outsourcing choice for international IDM manufacturers and IC Design Companies. Taiwanese OSAT sector also benefits from OEM orders.

【Competitive Niche】

① Strong Managing Team and Solid Strategic Alliance

Our major share-holders include well-known companies such as Kingston Group and Taiwan Toshiba Semiconductor, facilitating solid reputation and stable customer base. As our revenue continues to grow, support from our shareholders also ensures sufficient capital supply for our future operation and development. Furthermore, our management team is equipped with comprehensive working experience within the semiconductor sector and capability of making appropriate decisions according to market trend.

②Continued Development and Innovation

In response to rapid changes in semiconductor market, PTI is dedicated to technological development. In addition to developing new products, we continue to introduce new technologies through collaboration with our strategic partners. Our research and development team is equipped with capability in independent designing and developing testing software and hardware programs. In addition to continually developing testing program and improving testing equipment in areas of IC testing, we also continue to develop cutting edge technologies and services in respond to future mainstream IC market demand. Our business scope has extended into logic market from assembly, packaging and testing of memory products. Building on our leading advantage in assembly, packaging and testing for both memory and logic IC, PTI continues to expand its scope into 3D IC. In assembly and Packaging we have completed development in IC Chip-Stacking technology, Field Programmable Gate Array (FPGA) and Fan-Out Packaging technology, and have been rewarded many patents. We will also continue our effort in refining in material and production process.

③Turn-key Service and Flexible Capacity

We able to provide our customer integrated turn-key service of IC assembly, packaging, testing and packing service in a single order, effectively reducing shipping time and cost. In addition, we are able to respond quickly to market and customer demand and swiftly expand and adjust our capacity accordingly through timely investment in advance equipment, providing our customer with most competitive solutions.

(2) Hindering Factor and Responding strategy

① Fluctuation in IC Industry in Connection with Economic Climate

Strategic Response：

A. Product Diversification

In addition to continually strengthening our memory assembly, packaging and testing quality and technology, acquisition of Greatek Electronic Inc. also contributed immensely to expansion into Logic market. Furthermore, our new production technologies such as copper pillar bump, Re-distribution Layer (RDL), Wafer Level CSP, MEMS and SSD continues to achieve customer qualification. Through product diversification we are able to mitigate risk of economic cycle as well as provide our customer greater range of assembly, packaging and testing services

B. Strengthening Collaboration with Customers

Establish long-term partnership with existing customers, establishing Powertech Semiconductor (Xian) Co. Ltd. and actively developing new customers to achieve stable and sufficient level of capacity utilization.

C. Increase Market Scope

With Akita facility as production basis in Japan, supported by Tera Probe, Inc., PTI will establish comprehensive chain of supply in Japan.

② Erosion of Gross Profit by Increasing Material Cost

Strategic Response：

A. Lowering Production Cost
Mitigating the effect of increasing material cost by varying product structure, improving yield, developing alternative material solution and continue to improve production process.

B. Emphasizing Added value

Continue to support our customer with high quality product with short lead time and swift responding service. Enabling our customers to produce time-effective and competitive product through our dedication in developing new technologies.

③Manpower shortage

Strategic Response：

A. Increase staff welfare and bonus incentives to attract talent and encourage cohesion among staff members. We also design staff training program according to long-term development strategy to support progress for both company and staff member.

B. We will continue to improve productivity and dependence on manpower through actively introducing advanced automated equipment in conjunction with upcoming Industrialization 4.0.

C. Actively engage with universities to expand industry-academia cooperation and promote the industry-academia integration for the cultivation of new talent.

④Intensifying competition in the semiconductor back-end.

Semiconductor technology plays a critical role in the ever-changing field of advanced technology. In the past, most attention in the semiconductor supply chain was concentrated in the wafer foundry sector. In the post-Moore's Law age, semiconductor wafers produced by advanced processes must be complemented by advanced back-end packaging technology to realize their t rue performance. Foundries and PCB makers are now making a rush to enter the packaging sector. In response, PTI will continue to strengthen our R&D efforts, carefully assess our investments in new technologies and production capacity, and build solid partnerships with customer and suppliers. We will also strengthen the integration of our services from wafer testing through to the shipping of the final product to maintain our commanding advantage in the semiconductor back-end sector.

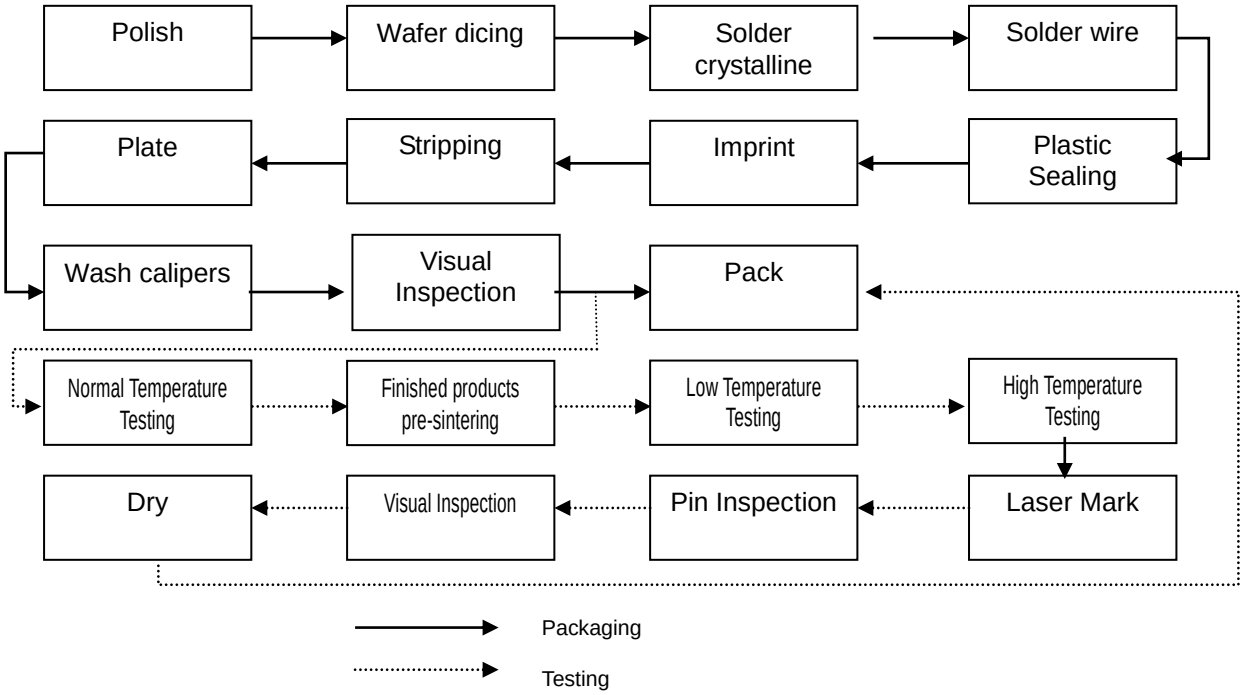
(2) Important Applications and Production Process of Main Products

1. Product Applications

Main Products or Services	Important Applications or Functions
IC Assembly	To turn Wafer into complete single product through sawing, mounting, wire bonding, molding, trimming/forming, and other processes of the Integrated Circuit (IC).
Final Test	Placing the IC into different environment such as normal, high, or low temperature to test and classify according to test conditions specified by customers. These steps ensure the product conforms to the quality and stability demanded by customers.

Main Products or Services	Important Applications or Functions
Burn-In	Using Burn-In process forced the IC operate in extreme environments to accelerate aging of the products and screen out the unqualified, to ensure reliability of products.
Laser Mark	Printing the name of company and product details on the IC.

2. Production Process



(3) Suppliers of Major Raw Materials

Our company mainly provides IC processing for our customers. The suppliers of the key raw materials used in packaging operations are listed below:

Main Raw Materials	Main Suppliers
Lead-Frame	Shinko Electric Ind. Co., Ltd. Nichiden Seimitu Kogyo Co., Ltd.
Substrate	Nan Ya Printed Circuit Board Corp. Unimicron Technology Corp. Simmtech Co., Ltd. Shinko Electric Ind. Co., Ltd. Kinsus Interconnect Technology Corp. Zhen Ding Tech. Inc. Shennan Circuits Co. Ltd.
Die Attach Film (DAF)	Hitachi Chemical Co.(HK) Ltd. Nitto Denko Corp.

Main Raw Materials	Main Suppliers
	LINTEC Corp. Henkel AG & Co.
Gold Wire	Chroma New Material Corp. TANAKA Kikinzoku Kogyo K.K.
Compound	Taiwan Hitachi Asia Pacific Co., Ltd. Showa Denko Materials Co., Ltd. Shin-Etsu Chemical Co., Ltd. KYOCERA Corp. Chao Young Corp.

(4) Information of suppliers' who commanding 10% and plus of annual purchasing volume in any year over the last 2 years.

1. List of major supplier accounted for over 10% of total purchase over the last 2 years.

Unit: NT$ Thousands

Year	2020				2021				As of 2022 Q1			
Rank	Name	Amount	Percent of total amount sold (%)	Relation with Issuer	Name	Amount	Percent of total amount sold (%)	Relation with Issuer	Name	Amount	Percent of total amount sold (%)	Relation with Issuer
1	A	2,951,768	10.72	None	A	3,235,128	10.68	None	A	929,888	11.39	None
2	B	2,237,810	8.12	None	**B**	2,549,265	8.42	None	B	840,835	10.30	None
2	Others	22,356,393	81.16		Others	24,507,386	80.90		Others	3,394,733	78.31	
	Net Amount Sold	27,545,971	100		Net Amount Sold	30,291,779	100		Net Amount Sold	8,165,456	100	

Reason for changes: PTI revenue increase contributed by capacity expansion, and customer demand increase.

2. List of Major Customers:

	2020				2021				As of 2022 Q1			
Rank	Name	Amount	Percent of total revenue %	Relation with Issuer	Name	Amount	Percent of total revenue %	Relation with Issuer	Name	Amount	Percent of total revenue %	Relation with Issuer
1	A	21,607,896	28.36	Related Party	A	21,803,359	26.02	Related Party	A	4,756,940	22.84	Related Party
2	B	16,116,653	21.16	None	B	16,881,041	20.15	None	B	4,664,100	22.39	None
3	C	11,035,903	14.49	None	C	9,345,484	11.15	None	C	241,096	1.16	None
	Others	27,420,197	35.99		Others	35,763,688	42.68		Others	11,168,495	53.61	
	Net Revenue	76,180,649	100		Net Revenue	83,793,572	100		Net Revenue	20,830,631	100	

Reason for changes: (1)PTI 2021 revenue increase contributed by capacity expansion, and customer demand increase.(2)1Q2022 Customer C sold core business to customer D as the major reason for revenue decline in 1Q22.

(5) Production Quantity & Value Table 2020-2021

Quantity Unit: 1,000 wafers Amount Unit: NT$ Thousands

Year / Production Units	2020			2021		
	Capacity	Quantity	Amount	Capacity	Quantity	Amount
IC Packaging	15,437,158	13,771,870	35,221,455	17,710,837	16,394,153	39,007,211
IC Testing	9,681,679	8,465,812	8,245,268	11,086,219	9,763,136	8,030,200
Module	238,016	145,271	7,710,594	205,469	154,842	6,838,249
Wafer Level Packaging	1,366	863	2,585,149	1,325	1,049	2,920,116
Wafer Level Testing	2,551	1,857	4,261,861	2,731	2,036	4,401,182
Total	25,360,770	22,365,673	58,024,327	29,006,581	26,315,216	61,196,958

(6) Sales Quantity & Value Table 2020-2021

Quantity Unit: 1,000 wafers Amount Unit: NT$ Thousands

Year / Sales Quantity & Value	2020				2021			
	Domestic Sales		Exports		Domestic Sales		Exports	
	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
IC Packaging	8,099,685	9,967,064	5,592,083	36,639,037	9,516,610	13,147,707	6,822,403	40,186,756
IC Testing	5,604,963	2,178,251	2,829,673	9,997,299	6,374,306	2,453,143	3,415,341	10,255,393
Module	84,606	387,991	42,980	8,372,497	87,854	304,927	45,193	7,370,216
Wafer Level Packaging	236	1,018,282	620	2,563,868	348	1,522,641	689	2,738,342
Wafer Level Testing	1,077	1,794,971	819	3,102,505	1,040	1,895,720	1,126	3,846,364
Others	—	1,287	—	157,597	—	32,165	—	40,198
Total	13,790,567	15,347,846	8,466,175	60,832,803	15,980,158	19,356,303	10,284,752	64,437,269

3. Employee Status

Table for Employees Number, Average Age, Average Years of Service, and Distribution of Education for Last Two Years

Year		2020	2021	As of Mar 31, 2022
Employees number	Administration and Management Staff	1,434	1,403	1,435
	R&D Engineering Staff	2,493	2,484	2,496
	Operators	7,674	7,648	7,653
	Total	11,601	11,535	11,584
Average Age		35.07	35.81	35.93
Average Years of Service		5.99	6.62	6.70
Education Distribution in %	Doctorates	0.08	0.05	0.03
	Masters	8.03	7.74	7.82
	College and Universities	71.60	71.40	70.92
	High School	19.89	20.23	20.57
	Below High School	0.40	0.58	0.66

4. Environmental Protection Expenditures

The total amount of losses (including reparations) and penalties due to environmental pollution caused in most recent year and as of the publication date of this annual report, and an explanation of future responses (including improvement measures) and possible expenditures.

(1)The total amount of losses (including reparations) and penalties due to environmental pollution caused as of most recent year and publication of annual report.

1. The Environmental Protection Bureau of Hsinchu City Government issued a notice (Fu-So-Huan-Kong Letter No. 1100189390) on December 17, 2021 stating that a system review conducted on November 12, 2021, found that the designated air pollution specialist for PTI Plant P8 was also designated as firefighting management personnel at Plant P8 between October 24, 2018, and October 23, 2020. This violated Article 34, Paragraph 4, of the Air Pollution Control Act, and Article 5 of the Regulations Governing the Exclusive Unit or Personnel of Air Pollution Prevention. A fine of NT$200,000 was subsequently issued on February 18, 2022.

Corrective actions: Another employee was designated as the firefighting management personnel for Plant P8 on October 24, 2020. The assignments of all related dedicated personnel at each plant were also reviewed, with all plants notified of the need to ensure the proper employment of specialist personnel.

Preventive measures: Established guidelines to ensure that dedicated personnel are assigned to dedicated roles at each plant. Register was set up to prevent duplicate assignments and employee education

strengthened.

2. A notice was issued by the Environmental Protection Bureau of Hsinchu County on November 23, 2021 (Huan-Ye Letter No. 1103403097) stating that an investigation into illegally dumped waste at land lot No. 1176-2 of Siayuan section, Jhudong Township, on May 3, 2021, determined that PTI's Hukou plant (Plant P2) had failed to contract with a licensed disposal company for the removal of the scrapped wastewater tank and sludge from its wastewater treatment facility. This violated Article 28, Paragraph 1 of the Waste Disposal Act, and a fine of NT$120,000 was issued on February 15, 2022.

Corrective actions: The site was immediately cleaned up and rehabilitated to the EPB's satisfaction.

Preventive measures: Compliance training and education organized for contractors and PTI employees.

(2) Expected Environmental Protection Capital Expenditures for Coming Years
Intended purchase of pollution prevention equipment or capital expenditure is listed below:

Unit：NT$ Thousands

Item/Year	2022	2023	2024
Greenhouse gas examination and consultant fees	400	400	400
Wastewater treatment and emission fees	36,711	41,687	43,118
Wastewater treatment fees	36,516	37,320	38,125
Environmental protection monitor & exam fees	2,000	2,000	2,000
Waste material disposal fees	6,000	6,000	6,000
Expansion of wastewater treatment equipment	98,510	45,860	30,360
Air pollution examination fees	1,162	1,162	1,162
Establish air pollution treatment equipment	12,330	2,330	2,330
Air pollution prevention fees	2,000	2,000	2,000
Total Expenditure Amount	195,629	138,759	125,495

2. Maintenance Measures

(1) Management Program:

The Company conducts the following programs to implement its responsibilities on environmental protection:

A. Air Pollution Control: Set up air pollution control equipment VOCs. Regularly exam the air quality to meet Environmental Protection Bureau standards. Hsin Chu Science Park Plant I and II both adopted Best

Available Control Technology (BACT) to eliminate the impact on the environment.

B. Recycle Waste Water: Utilize waste water recycle system to reduce waste on resources and re-use the recycle water to save and protect the water resources.

C. Water Pollution Control: all facilities waste water must be treated and meet official standard before release back to the water system. Internal monitoring system and regular measure & calibration were in place.

D. Waste Disposal: The entire disposal must meet environmental protection regulations. Enhance the recycle and re-use rate by well-classify materials.

E. Work with suppliers: Regular inspects suppliers to meet environmental protection regulations.

F. Climate Change and Energy Control: the company has established Greenhouse Gas Control Procedures followed the guidance of ISO14064-1 and Task Force on Climate-related Financial Disclosures (TCFD) to reduce impacts and financial risks of extreme weather.

G. Voluntary Environmental Monitor Program: Program including waste water, noise, air quality, waste material impact on environment to effectively control the company operations impact on the environment.

H. Allowance Permit: Consistently monitor the company operations meet the latest environmental standards.

(2) Environmental management performance

A. Air pollution control:

a. The Company emitted 100.4 tons of Volatile Organic Compounds (VOCs) in total during 2021. The reporting and payment of pollution control fees for use of VOCs were completed through the EPA Air Pollution Control Fee for Stationary Sources System every quarter as required by law.
b. Regular monitoring data provided by qualified external contractors indicated that concentrations of polluting emissions from all factories were lower than the regulatory threshold.
c. The Best Available Control Technology (BACT) was adopted by the Hsinchu Science Park (HSP) Factory and HSP Factory 2 for treating VOCs. Environmental impact is reduced through the Zeolite concentrator rotor/regenerative incinerator.

B. Waste water treatment and process recovery:

a. Regular monitoring of discharge water quality indicated that concentrations of all pollutants was lower than the regulatory threshold.
b. Total waste water discharge from all PTI sites in amounted to 1,990,110 tons in 2021, an increase of 107,842 tons compared to 2020. The increase in total waste water (sewage) discharge compared to 2020 was due to an increase in production output in 2021.
c. PTI Taiwan achieved a 37% recovery rate for water used in the packaging process in2021.

C. Waste disposal:

a. Waste was recycled for reuse if possible during waste disposal to turn rubbish into usable resources; The recovery and reuse of waste liquid produced by raw materials at the PTI HSP Factory reused of 92.46 tons recycle material in

2021.

b. PTI Taiwan recycled 1,034.64 tons of waste in 2021, On average, 86.22 tons were recycled each month.
c. Waste disposal/treatment/recycling contractors undergo field/written audits or random tracking of their vehicles every year. A total of 56 regular audits were conducted for waste contractors during 2021.

D. Energy conservation and greenhouse gases

a. Preference was given to high-efficiency models as well as green refrigerants with lower global warming potential (GWP) during the selection of factory equipment to reduce GHG emissions.
b. ISO 50001 Energy Management System certification was obtained by PTI in 2021.
c. Total power savings in 2021 amounted to 13,036,455 kWh, or the equivalent of 46,9331.2 GJ, and met the target of reducing energy consumption by 1%.
d. Green building design is now introduced during the planning of new factories to reduce the consumption of energy and resources.

5. Labor Relations

(1) The Implementation Status for Employee Welfare Policy, Training and Continue Education

PTI values the salary and benefits for its employees and offers lawful benefits. According to the bonus payment specifications, annual earnings minus taxes, surplus and dividends are then appropriate for employee bonuses. Employees can also enjoy benefits provided by the Employee Welfare Committee. With PTI family day, movie screenings and year end banquets to relieve stress from work and bond with coworkers.

1. Insurance: All PTI employees are insured with free general group insurance (including life, accident, medical, cancer, and other insurances). In the spirit of caring for employees as well as their families, the spouse and children of employees also include in the free group insurance.
2. Health and Safety:
   (1) Through professional medical staff and health management, PTI conducts health promotion and health management for employees. All plants are staffed with professional medical personnel to monitor the health of employees. We collaborate with professional medical organizations to conduct health examinations for employees.
   (2) We conduct risk management and assessment for resumption of work for individuals with high health risks. We also offer health information and courses.
   (3) PTI prevent the disease triggered by abnormal workload by self-reporting the workload, work in day/ night shift, prolonged abnormal workload, irregular schedule, frequent business trips, or tense working conditions. These employees undergo health risk evaluation, overwork risk evaluation, and Framingham risk evaluation. On-site doctors evaluate the results, talk with the employees, and if necessary, change job positions, decrease working hours, or take other administrative management to maintain employee health.
   (4) In 2004, PTI obtained the OHSAS 18001 occupational health and safety management certificate. To prevent occupational injuries and accidents and ensure the safety and health of our workplace, we also devised our "Environmental Safety and Health Policy".

   Environment, Safety and Health Policy

   • Communicate ESH policy to employees, customers, and related groups.

   • Comply with environmental protection, safety and health legislation/regulations and customer requirements.

   • Consult and engage with workers and their representatives on the prevention of injuries, diseases, and accidents as well as damage control.

   • Actively promote energy efficiency and waste reduction initiatives in response to international trends in environmental protection and the organization’s current circumstances.

   • Engage in continuous review and improvement to set higher targets for safety, health and environmental management, and improve their overall performance.

3. PTI uses the "Psychological Counseling System" to let employees unload burdens and listened to themselves in this ever changing world of responsibilities. Care-free conversations during the Psychological Counseling System to heal inner wounds, rejuvenate, see a different world, and create a healthy work environment.
4. Company Trips: Employee Welfare Committee has unscheduled company trips to for coworkers to bond with each other. In 2021, we offered vouchers of a value of NTD$1,500 to each employee. PTI Taiwan also signed contract with renowned travel agencies to offer package tour or coupon to employees, allowing them to achieve the

balance between commitments to work and relaxing lifestyles.

5. Family Day/ Large-scale events: Family Days and other large-scale leisure events were organized by the Employee Welfare Committee on a regular basis. PTI employees and their dependents are all part of the PTI family and the hosting of Family Day events create opportunities for employees and families to have fun together, and for employees to bond with each other. The balancing of employee and social welfare warm employees' hearts and bring them more happiness outside of work. The evolving COVID-19 pandemic meant PTI had to make rolling adjustments to event formats during the course of 2021. Large physical gatherings were held as "online events" instead to ensure that there is no interruption in our support and invigoration of employees. During 2021, we continued to target the three elements of "Care, Health, Technology" by creating a friendly workplace that fells "Promising, Thriving, Inspiring" to employees. By stimulating the boundless creativity of our employees, we can motivate them at and away from work so they can craft their own exciting PTI life.
6. Employee Club Activities: We value the balanced development of work and life of our employees. PTI's Employee Welfare Committee plans a variety of events throughout the year and encourages employee participation to relieve stress from work, bond with coworkers, develop physical and mental health, cultivate cultural knowledge, promote social welfare, and thus become an employee in the technology industry with LOHAS. We have 9 employee clubs with 405 members.
7. Ask for Leave: In accordance with Labor Standard Act, PTI offers holiday and annual leave to employee. Regular reports are provided to supervisors to assist employee has a balanced work and life.
8. Birthday/ Funeral and Other Benefits:
   (1) Birthday star is given a coupon equivalent of NTD$500 to celebrate his/her birthday. Employees with matters of material contingencies are offered a grant from NTD$1,000 to NTD$10,000.
   (2) PTI offers NTD$1,000 value of cash or equivalent coupon, gift on annual Labor's Day.
   (3) PTI offers coupon/ gift equivalent of NTD$1,000 during Dragon Boat Festival, Mid-autumn Festival etc.
   (4) Gifts are offered to employees with 3, 5, 10, 20 years of seniority.
9. Maternity Subsidies and Other Services: A NTD$2,000 of subsidies per child birth are provided to employee or its spouse. Also, PTI provides related application services for labor insurance. PTI cares about the employees and their interaction with their families. By having the employee welfare committee signing designated kindergartens and child-care facilities in the areas where employees reside, we offer options of pre-school care for the children of our employees, so that the employees can excel in both their work and their family life without any worries.
10. Food and Housing: (1) PTI has outsourced catering services with subsidies for employees. Employee only has to pay a small amount to enjoy lavish meals. Catering Committee has been established since 2008 to enhance the quality and welfare of employees. (2) PTI offers dormitory option for long distance commute employees.
11. On-Job-Training: To ensure a diverse talent, we "listen to needs" to consider internal and external issues. PTI has committed to meet the demand of employee learning, organizational development, and company policies, which has led to PTI's unique "need and resolution oriented" operational model and training system, where PTI enhances the managerial abilities of executives, improve employee competence, and ensure the sustainable growth of the company. PTI has been promoting virtual training courses and e-books for continue education especially during the COVID-19 periods.

(2) The Implementation Status for employee retirement and pension system

1. Retirement Condition

Condition	Details
A. Voluntary	A、Individual who served in the company over 15 years and over 55 years old. B、Individual who served in the company over 25 years. C、Individual who served in the company over 10 years and over 60 years old.
B. Mandatory	A、Individual who was over 65 years old. B、Individual who certified by public medical institutes with unfit physical or mental condition to work.

2.PTI Taiwan follows the Labor Standards Law and the Labor Pension Act in implementing employee retirement regulations and established a labor pension supervision committee to appropriate the full amount of pension contribution for employee to apply for pension after retirement. The insurer of Annuity Insurance is an insurance company approved by the central competent authority and the insured of the Annuity Insurance contract is the employer who will insure from the same insurer. The workers are the insured persons and beneficiaries. The Annuity Insurance premium to be paid by the employer each month may not be less than 6% of the monthly wages of the worker. In 2021, the listed total amount contributed to pension was NT$378,624,823.

(3) Negotiation between Management and Labor and the Implementation of Employee Rights

1. Employee Care:

PTI values the opinion of its employees. We offer various channels to encourage communication between employees and the management, so that we thoroughly understand employees' satisfaction with management and welfare systems and maintain good labor-management relationship. Since our foundation, PTI has enjoyed harmonious labor-management relationship. There has been no occurrence of labor-management disputes that resulted in losses. The possibility of future labor management disputes leading to losses is extremely low. In addition, with quarterly labor management meetings and welfare committee meetings, employees can voice their opinions on specific issues and reach agreement with the company through discussions in the meetings, thus perpetuating effective communication channels. PTI also respect and protect employees' rights of freedom of speech and freedom of assembly and association. The quarterly labor management meetings are negotiated by labor representation voted by employees.

2. Comprehensive Communication Channels

We have established comprehensive channels for diverse, two-way, and open communication. By helping employees communicate their opinions to the management, their concerns can be effectively taken care of. Our fair, confidential, and efficient handling procedure resolves employees' concerns while maintaining good labor management relationship. We have also established sexual-harassment prevention measures, employee psychological counseling services, and rewards and discipline regulations. We are always listening to employees' opinions. Anonymous or otherwise, we always exercise confidentiality and fairness in handling such information. All forms of retribution are protected against, so that employees can express their concerns without fear.

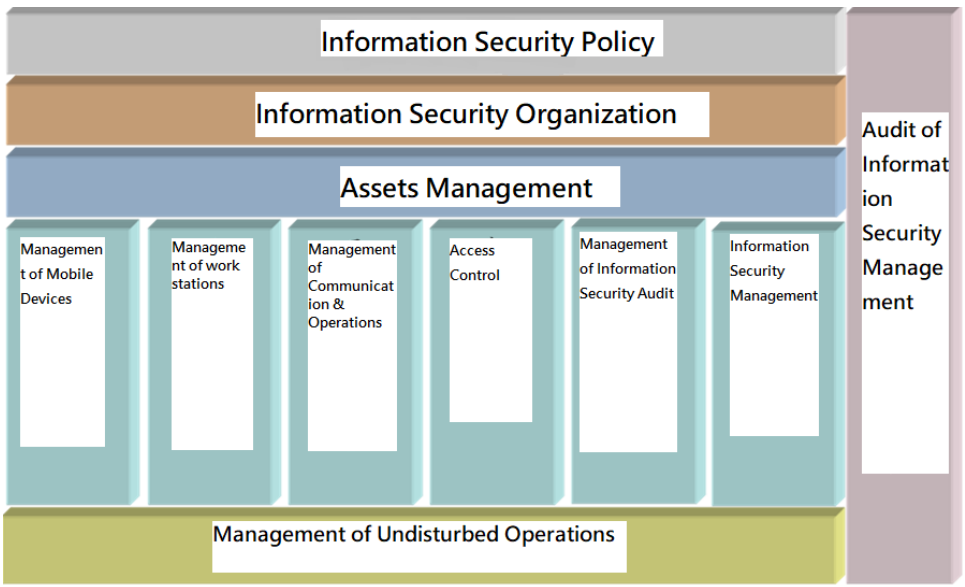
(4) Status of Violation of Labor Standards Act：None

6. **Information and Cyber Security Management**

(1) Information Security Risk Management Structure

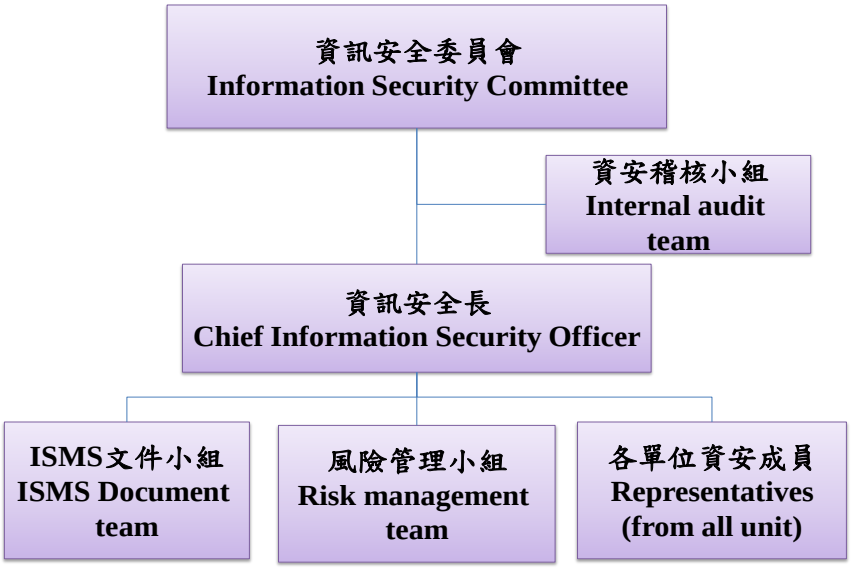
1. Information security governance system

The “Information Security Management Committee” (“Infosec Committee”) was established in February 2016 to ensure the information security of PTI. The Infosec Committee is responsible for promoting and managing the deployment, operation and maintenance of the information security management system. Effective communication is to be conducted in accordance with the “ISMS Communication Checklist” with the state of information security governance reported to the Board of Directors regularly. ISO 27001 certification was obtained by PTI in October of the same year and internal controls based on the standard put into place. A variety of methods including management review, internal audit, risk assessment, corrective and preventive measures for example were used to establish an information security management mechanism, strengthen information security protections, and enhance the standard of information security.



2. Information security governance system

(1) Scope of Information Security Committee:



(1) Composition of the Information Security Committee: The unit reports directly to the President according to the PTI organization chart. The top managerial officers in the unit make up the Infosec Committee.

(2) The top managerial officer of the information department is also the Chief Information Security Officer (CISO) of the Infosec Committee.

(3) The audit team is composed of personnel from the audit unit and information management department. A representative assigned by the Audit Office serves as the team leader. The team is responsible for internal audits related to ISMS< PIMS and trade secrets.

(4) The document team is composed of personnel from legal affairs and information management department. A representative is assigned as the team leader. The team is responsible for preparing documentation related to ISMS, PIMS and trade secrets, as well as matters related to security awareness, education and training.

(5) The risk management team is composed of personnel from legal affairs, information management department, and packaging & testing RD department. A representative is assigned as the team leader. The team is responsible for matters related to asset registries, risk management, and emergency response.

(6) The information security personnel of each unit are designated by the head of each unit. They assist with the promotion of tasks related to ISMS, PIMIS and trade secrets.

(7) A list of all members is maintained by the CISO in the “Infosec Committee Membership List” and kept up to date when there is a change in membership。

(2) Information Security Policy

1. Enterprise Information Security Management Strategy and Structure

To enforce effective information security management, the enterprise information security organization followed the “Plan-Do-Check-Act” (PDCA) model set out in the ISO/IEC 27001:2013 specifications for the development, maintenance, continuous improvement and documentation of an information security management system. This included laying down of principles for the functions of the management organization, document record management, and various information security control measures. The

focus of the information security management system is on protecting the information assets of key company businesses. All activities must be documented or logged in an appropriate manner to ensure effective cooperation. The relevant steps are set out in the corresponding chapters.

✓ Planning Phase

Strong emphasis is placed on information security risk management. The implementation of Information Security Management System (ISMS) in full was used to push for ISO/IEC 27001 international information security management system certification at each site. Risks to enterprise information security were mitigated at the system, technical, and procedural level to establish the highest standard of protection for confidential information and meet customer requirements.

✓ Execution Phase

A multi-layered information security architecture was constructed through the continuous introduction of information security protection equipment and technologies. Information security controls were integrated into the routine operations such as software/hardware operation and maintenance, and supplier information security management. Systemic monitoring of information security was also implemented to maintain the confidentiality, integrity and accessibility of PTI's key assets.

✓ Review Phase

Verification and monitoring of information security management was conducted. Review findings were used to gage information security indicators and for quantitative analysis. Simulated cyber-attack drills were also carried out regular intervals to evaluate the maturity of information security.

✓ Action Phase

Emphasis on review and continuous improvement. Effective supervision and audits are enforced to ensure the continued effectiveness of information security guidelines; Any employee violations of related guidelines and procedures are handled in accordance with the Information Security Violation Management Regulations. Disciplinary action is also taken depending on the nature of the violation (including action on the employee's annual performance evaluation or the taking of any necessary legal action); The performance indicators and the results of the maturity evaluation are also used for regular reviews and execution of improvements to information security measures, education training, and awareness to ensure confidential information critical to PTI is not compromised.

(3)Control Plans in details

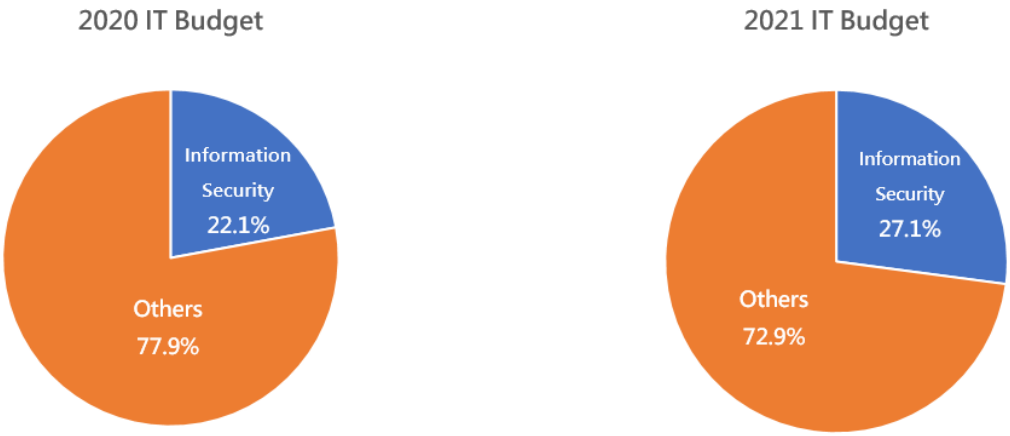
1. Control Plans in details

2. Monitoring

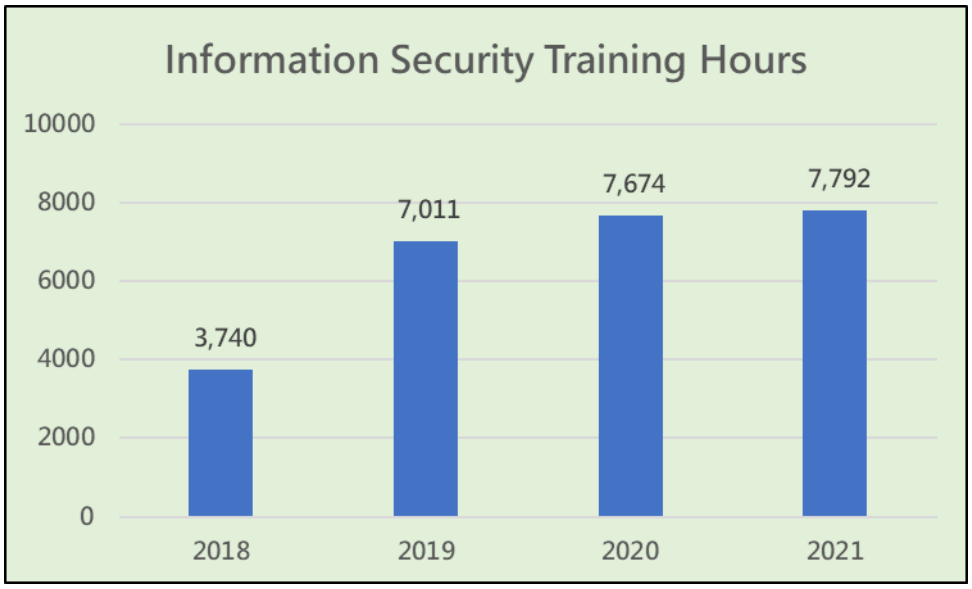
Risk analysis was carried out using the subjective findings of third-party audits and threat intelligence. Regular corporate network and information security assessments were conducted and received a rating of A.

(4) Investment of Information Security Management

1. Weight of Information Security Investment



2. Information Security Training



(5) Estimates of any damages or loss as the end of Mar 2022 cause by information security misconducts: None.

7. Major Contracts

Contract Classification	Contract Company	Contract Duration	Main Contents	Limitations of Terms
Outsource Services Contract	A Company	Jun 2019 ~	Packaging and testing services	Non-disclosure agreement
	F Company	Dec 2019 ~ Dec 2022	Packaging and testing services	Non-disclosure agreement
	I Company	Dec 2019 ~ Dec 2022	Packaging and testing services	Non-disclosure agreement
Asset Acquisition Contract	Chuan Ya Marble Co. Ltd.	Mar 2022 ~ Jan 2024	Land and facility acquisition	Non-disclosure agreement
Bank Loan	CTBC Bank	Sep 2021 ~ Sep 2024	Medium-term credit loan	Commitment to maintain a certain ratio between the assets & liabilities and net worth
	Mega International Commercial Bank	Dec 2020 ~ Dec 2023	Medium-term credit loan	None
		Oct 2021 ~ Oct 2026	Medium-term credit loan	None
	Yuanta Commercial Bank	Sep 2021 ~ Sep 2025	Medium-term credit loan	Commitment to maintain a certain ratio between the assets & liabilities and net worth
	KGI Bank	Dec 2020 ~ Dec 2024	Medium-term credit loan	Commitment to maintain a certain ratio between the assets & liabilities and net worth
	E.Sun Bank	Sep 2017 ~ Sep 2032	Building Construction	None
		Sep 2017 ~ Sep 2024	Building Construction	
		Jul 2021 ~ Jul 2024	Medium-term credit loan	
		Jul 2021 ~ Jul 2028	Machinery & Equipment Loan	
	Hua Nan Bank	Sep 2021 ~ Sep 2024	Medium-term credit loan	None
		Mar 2021 ~ Mar 2024		
		Jul 2021 ~ Jul 2024		
		Jun 2021 ~ Jun 2024		
		Aug 2021 ~ Aug 2024		
		Sep 2021 ~ Sep 2028		
	First Bank	Mar 2021 ~ Mar 2026	Medium-term credit loan	None
		Oct 2020 ~ Oct 2025	Building Construction	

Contract Classification	Contract Company	Contract Duration	Main Contents	Limitations of Terms
		Dec 2021 ~ Dec 2028	Medium-term credit loan	
	Bank of Taiwan	Nov 2012 ~ Nov 2027	Building Construction Loan	None
		Aug 2021 ~ Aug 2031		
		Oct 2019 ~ Oct 2024	Machinery & Equipment Loan	
		Jun 2020 ~ Jun 2025		
		Aug 2021 ~ Aug 2028		
	Taiwan Cooperative Bank	Apr 2017 ~ Apr 2032	Building Construction Loan	None
		Apr 2017 ~ Apr 2024	Medium-term credit loan	
		Dec 2021 ~ Dec 2028	Machinery & Equipment Loan	
	Shin Kong Bank	Nov 2020 ~ Nov 2023	Medium-term credit loan	None
	Chang Hwa Bank	Dec 2021 ~ Dec 2028	Machinery & Equipment Loan	None
		May 2019 ~ May 2025		
	Taishin Bank	Mar 2021 ~ Mar 2024	Medium-term credit loan	Commitment to maintain a certain ratio between the assets & liabilities and net worth
	Land Bank of Taiwan	Aug 2020 ~ Aug 2023	Medium-term credit loan	None
	HSBC	Sep 2021 ~ Feb 2025	Medium-term credit loan	None
		Sep 2020 ~ Sep 2023		
	MUFG Bank	Oct 2019 ~ Oct 2022	Medium-term credit loan	None
		Dec 2020 ~ Dec 2023		