

I. Letter to Shareholders

Annual General Meeting of Shareholders 2024

Dear Shareholders, Ladies and Gentlemen,

Three years ago, I stepped down as the CEO of Powertech Technology Group to focus on integrating the resources of the Group's subsidiaries and strengthening cooperation among teams so that we can build a complete and competitive supply chain for semiconductor packaging and testing service. Training and succession planning for middle and high-level management was also initiated at the same time. Significant manpower and resources were invested in the research, development and manufacturing of advanced packaging and testing technology in particular to realize a total transformation of the team that we built up over many years.

“Operating results for the previous fiscal year” and “Analysis of receipts, expenditures, and profitability; and examine research and development work”

Under the leadership of CEO Boris Hsieh, PTI President J.S. Leu, Greatek President Louis Ning, Tera Probe (Japanese subsidiary) President Tsuyoshi Yokohama, and President C.H. Lin all worked together to weather the COVID-19 pandemic, the US-China technology trade-war, and the impact of geopolitics. Both revenue and profits would hit record highs in 2021 and 2022:

Revenue in 2021 reached NT\$83.794 billion and earnings per share (EPS) was NT\$11.54; revenue in 2022 reached NT\$83.927 billion and earnings per share (EPS) was NT\$11.60.

2023 proved a very challenging year for the global economy. The semiconductor industry experienced its most serious recession in more than 20 years and the PTI Group did not escape unscathed with turnover falling by about 16%. Turnover in 2023 was therefore NT\$70.441 billion with an EPS of NT\$10.72. For the management team, I offered the following words of encouragement: "When it's all smooth sailing, business and profit growth does not equate to first-class management, because most of that is due to opportunistic wealth; A first-class management team overcomes obstacles in times of adversity and creates opportunities for future sales and profitable growth."

“The effect of external competition, the legal environment, and the overall business environment.”

Our management team and employees achieved this in 2023. Despite the decline in turnover, disposing most of our equity in the Suzhou factory meant our profits and EPS for the year still amounted to more than our net worth. More importantly, significant progress was made in advanced packaging technologies, such as:

1. Large-size FCBGA successfully obtained certification from major customers and started mass production;
2. CIS and CSP based on TSV connections started mass production. Our yield and product performance are the best in the industry;
3. SIP/SIM technology has been recognized and verified by major customers and will enter mass production;
4. In FOPLP, high-end product customers used to lack confidence in the quality of large-panel FO. More customers are now turning to FOPLP however due to the limited volume and high cost of wafers for multi-chip FO integration.

“Future development strategy”

2024/2025 will be a critical period for PTI. We must concentrate resources on mass production of the packaging and testing technologies developed over the last few years, with a particular emphasis on the development of advanced process technologies as well as yield stability and improvement. We will therefore:

1. Leverage our technology to grow the TSV CIS CPS customer base;
2. Become the only OSAT capable of mass producing Via Middle HBM;
3. Challenge 2.5D and 3D packaging and testing technologies to provide customers with another competitive "CoWoS-like" solution;
4. Work with strategic suppliers to develop more flexible and competitive equipment for FOPLP.

We have now restarted capital expenditures to actively prepare for opportunities in 2025 and 2026. We wish everyone a prosperous Year of Dragon! May you all enjoy health and safety!

Sincerely,
D.K. Tsai

PTI Chairman

Powertech Technology Inc.

2023 Business Report

I. 2023 Business Report

According to the World Economic Outlook published by the International Monetary Fund (IMF) in January 2024, global growth was about 3.1% in 2023 and is projected at 3.1% in 2024 and rise modestly to 3.2% in 2025 which below the historical (2000–2019) average of 3.8%. The global inflation rate reached 6.8% in 2023, and IMF predicts that it will fall to 5.8% in 2024 and 4.4% in 2025. Inflation is falling faster than expected in most regions, in the midst of unwinding supply-side issues and restrictive monetary policy, and risks to global growth are broadly balanced.

Affected by multiple uncertain factors, such as global geopolitics and technological competition, the pressure of the ongoing war, the election year of advanced countries, and the reorganization of global supply chains, global economic activities are still showing a continuous slowdown. However, driven by high-speed computing and generative AI, electronic products such as servers, automobiles and industrial applications will evolve towards more automatic and smarter processes, bringing growth momentum to the semiconductor industry. The semiconductor boom is expected to rebound in 2024.

According to the research by Gartner, a technological research and consulting firm, global semiconductor market revenue declined by nearly 11% in 2023, falling to US\$533 billion. In view of the development of AI chips, global revenue is expected to surge by nearly 17% in 2024, reaching US\$624 billion, and the overall market size will even exceed that of 2021 and 2022. Based on a study of Industrial Economics and Knowledge (IEK) published in February 2024: expected that Revenue of Taiwan semiconductor industry was NT\$ 4,343 billion which was 10.2% decreased from 2022. Revenue of Taiwan IC packaging sector was NT\$ 393 billion which was 15.6% decreased from 2022, and revenue of Taiwan IC testing sector was NT\$ 191 billion which was 12.8% decreased from 2022.

In the face of the global economic market recession in 2023, with the demand for automotive electronics, servers, high-speed computing, artificial intelligence(AI) and other clients continuing to grow, and benefiting from urgent orders from customers, PTI's performance this year is better than expected. In the future, PTI will continue to deepen our research and development technology, provide excellent quality and services, and continue to invest in 2.5D and 3D packaging to meet customer and market needs.

Details of 2023 revenue and profitability are reported as follow:

1. 2023 Operations Results

PTI Consolidated revenue of 2023 was NT\$ 70.441 billion, which was 16% decrease from 2022 consolidated revenue of NT\$ 83.927 billion. 2023 net income belonged to parent company was NT\$ 8.008 billion which was 7.8% decrease from 2022 NT\$ 8.687 billion.

2. Financial Status

2023 Consolidated Statement of Cash Flow		(in NT thousand)
a. Net cash inflow from operating activities		19,681,581
b. Net cash outflow from investing activities		5,302,594
(Changes mainly from acquisition of machinery and equipment)		
c. Net cash outflow from financing activities		13,529,971
(Mainly for repayment of loans)		

3. Profitability Analysis

Analysis Items		2023	2022
Profitability	Operating Income / Capital Ratio	107.40%	163.97%
	Pre-tax Net Income / Capital Ratio	158.64%	179.67%
	Return on Assets	8.49%	9.22%
	Return on Equity	14.04%	16.59%
	Net Income (Loss) Ratio	11.37%	10.35%
	Net Income(Loss) Per Share	\$10.72	\$11.60

4. R&D Updates

PTI has been constantly devoted to new technologies and production technologies development to meet industry standards and customers' demand. 2023 R&D expenses were NT\$2.458 billion which was about 3.49% of consolidated revenue. In addition to DRAM and NAND Flash products, PTI has been developing advanced packaging & testing and heterogeneous integration, such as Copper Pillar Bump (CPB), Flip Chip CSP (FCCSP), Large Flip Chip Multi-Chip Module Ball Grid Array (Large MCM FCBGA), Chiplet FCBGA, System in Package (SiP/SiM), Antenna in Package / Antenna in Module (AiP/AiM), High Band Package on Package (HBPoP), Embedded Heat Sink Flip Chip CSP (Embedded H/S FCCSP), Wafer Level Package (WLP), CMOS Image Sensor Chip Scale Package (CIS CSP), 2.5D/3D Through Silicon Via (TSV), and Fan-Out Wafer/Panel Level Package (FOPLP). With the lab for Antenna in Package (AiP) and Radio Frequency (RF), PTI provides certify services of 5G products. Apply TSV technologies on CIS CSP products to enhance performance of health care, surveillance, and automotive devices.

In High Bandwidth Memory (HBM), also apply TSV technologies to improve the bandwidth memory and speed of High Performance Computing (HPC) and cloud servers. Coping with the difficulties of post-Moore's Law applying on Chip Scaling, FOWLP/FOPLP has been engaged with customers in development and certification to provide comprehensive solutions.

II.2024 Annual Operating Plan Summary

1. Business Policy:

- (1) Keeping “Promise,” creating innovative “Technology” and providing “Integration” services are our core company values.
- (2) Focus on the semiconductor assembly and test services; and collaborate with customers and vendors for mutual benefits.
- (3) Commit to developing advanced technologies and timely launching new products to enhance growth momentum.
- (4) Provide the turnkey solutions with reliable quality and cutting-edge technologies.
- (5) Consolidate resources and strengthen operational efficiency to ensure business profits and sustainability.
- (6) Develop talents; and create a winning joint value between employee benefits and shareholders’ interests.

2. Sales Volume Projection:

According to the 2024 semiconductor sales forecast released by the World Semiconductor Trade Statistics (WSTS) in November 2023, the global semiconductor market will grow by 13.1% annually in 2024, with sales reaching US\$588 billion. Memory will be the most important part of growth with YoY 44.8%. WSTS expects that all markets are expected to grow. The European and Japanese markets will grow by 4.3% and 4.4% respectively, the American market will grow by 22.3%, and the Asia-Pacific region will grow by 12%.

Regarding the semiconductor industry in Taiwan, ITRI expects that as the inventory adjustment comes to an end, the end consumer market demand recovers, and the demand for applications such as AI and HPC continues to increase, IC design, manufacturing, packaging and testing industries are expected to get rid of the poor market conditions and gradually return to positive growth. It is estimated that the output value of the IC industry will reach NT\$4.9 trillion, an increase of 14.1% compared with 2023. It shows the strong global competitiveness of Taiwan’s semiconductor industry.

Looking forward to 2024, with the rise of various types of emerging applications, including AI, EV and self-driving cars, data centers, low-orbit satellites, electronic medical care, home electronics, and innovative functions of various mobile devices, semiconductors will remain the leader in the ICT industry, and growth is still expected.

It is worth noting that the global supply chain reorganization trend is moving towards regionalization and short-chain, and the uncertainty of global trade prospects is increasing. In addition, geopolitical concerns and regional wars are not easy to resolve in the short term, which will impact energy supply and affect industries and people's livelihood. Although inflationary pressure in major European and American countries has cooled down slightly, it is still relatively high, affecting the economic and financial situation. In mainland China, the economy continues to stagnate and deflation is worsening, which affects global economic recovery and requires further close observation.

It is estimated that the production volume of various products in 2024 will continue to grow significantly for logic chip packaging and testing, while memory chip packaging and testing will see opportunities for recovery amid steady growth. The production volume of various products in 2024 is as follows:

Item	Sales Forecast Volume
Assembly	12 B packages
Final Test	6.5 B packages
Wafer Level Package	800 K wafers
Chip Probing	1.75 M wafers
SSD + SiP	126 M PCS

3. Key Production & Marketing Policies:

- (1) Provide one-stop turnkey solution to reduce cycle time and logistics costs.
- (2) Maintain the leading position in memory assembly and testing service market.
- (3) Keep developing Logic business and increasing sales in Flip-Chip, SSD, Wafer Level Package, Chip Probing, TSV CIS, 3D-IC memory stacking (HBM), System in Package (SiP), and Fan-Out Package business.
- (4) Strengthen the long-term collaboration relationship with existing customers, and expand business through the development of new markets, applications, customer base and products.
- (5) Enhance competitiveness through effective production cost control and PTI Group's overall competitive advantage.

Chairman: D.K. Tsai

President: J.S. Leu

Head of Accounting: Evan Tseng