

## I. Letter to Shareholders

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Annual General Meeting of Shareholders 2020

Dear Shareholders, Ladies and Gentlemen,

The first half of 2019 experienced a significant drop in PTI revenues due to a number of factors, including market uncertainty caused by the US-China trade conflicts, over-supply of memory products, and the slowdown in smartphone sales. Fortunately, the second half of the year experienced a robust rebound in the memory and logic segments due to lower inventory levels and continued strong demand. PTI's revenues and profitability for 2019 was therefore only slightly down from 2018. PTI outperformed the semiconductor industry.

In 2020, PTI expects to benefit from the strong demand driven from new applications for Artificial Intelligence (AI), 5G communications, Internet-of-Things (IoT), smart driving, and high-performance computing. PTI expects a positive revenue growth for 2020 underlining uncertain factors like COVID-19 epidemic and regional trade conflicts. COVID-19 spray appears to be under control in Mainland China. The Chinese supply chain has been recovered and mitigated impact on the world economy. European and North America cities lockdowns and international travel bans to prevent the spray of COVID-19 created a significant uncertainty for world economy.

PTI will remain committed to our strategy of focusing on the research and development of advanced packaging and testing technologies even at a tuff environment like now. PTI will focus even more on the goal of becoming the global leading provider of packaging and testing. In the future, PTI will intensify our investment in:

1. The research, development and manufacture of advanced technologies.
2. The recruitment and cultivation of quality talent.
3. Building closer partnership and win-win strategy with customers and suppliers.

PTI has been working as one of the best service providers of packaging and testing in the world. PTI wants to step up to be the world's top service provider of packaging and testing services by focusing on quality, technology and service enhancement. PTI believes that all the preceding efforts will shine through and recognized by customers. I sincerely look forward to PTI becoming a better global leader in packaging, testing, and manufacturing by 2025.

I thank you for your continue support as shareholders. Your supports provide motivation for PTI employees to work hard and deliver great results.

Once again, my gratitude goes out to all shareholders for your support!

I wish everyone all the best of health and success.

Sincerely,  
D.K. Tsai

PTI Chairman

# Powertech Technology Inc. 2019 Business Report

## I. 2019 Business Operations Report

According to the World Economic Outlook published by the International Monetary Fund (IMF) in January 2020, global economic growth in 2019 was 2.9% which grew the least since 2008 financial crisis. Major economic weakness was caused by trade conflicts between US and China, uncertainties of Briexit, and tension from multiple geopolitical regions. Raising prices of stocks, bonds, real estates, and other financial products stimulated by hot money from quantitative easing policy across central banks in US, Europe, and emerging countries.

2019 global semiconductor revenue was US\$418.3 billion which declined 31.5% from 2018 base on the study conducted by Garthner. The decrease was triggered by market uncertainties and weakening of memory product cycle. According to data published by Industrial Economics and Knowledge (IEK) in February 2020, Taiwan IC industry revenue in 2019 was NT\$2.67 trillion (US\$86.3 billion), 1.7% growth from 2018. Revenue of IC packaging sector was NT\$346.3 billion with 0.5% growth from 2018, and revenue of IC testing sector was NT\$154.4 billion with 4.0% growth from 2018. Taiwan semiconductor market outperformed the global semiconductor industry in 2019.

PTI 2019 revenue declined slightly from 2018. Second half of 2019 revenue robust recovered from normalizing inventory level and strong demand make up the revenue decline in first half 2019. PTI will continue to invest in technologies to provide excellent quality and services going forward. PTI 2019 accomplishment contributed by its excellent quality and services, operations efficiency improvement, efficient cost control, new technologies and products development, equipment investment, and strategic alliance strengthening.

Details of 2019 revenue and profitability are reported as follow:

### 1. 2019 Operations Results

PTI Consolidated revenue of 2019 was NT\$66.53 billion, showing 2.23% decrease from 2018 consolidated revenue of NT\$68.04 billion. 2019 net income belonged to parent company was NT\$5.84 billion which was a decrease of 6.35% from 2018 NT\$6.23 billion.

### 2. Financial Status

2019 Consolidated Statement of Cash Flow	(in NT\$1,000)
a. Net cash inflow from operating activities	17,832,243
b. Net cash outflow from investing activities	8,155,769
(Changes mainly from acquisition of machinery and equipment )	
c. Net cash outflow from financing activities	6,250,418
(Mainly for repayment of bank loans and distribution of cash dividends)	

### 3. Profitability Analysis

Analysis Items		2019	2018
Profitability	Operating Income / Capital Ratio	111.82%	125.57%
	Pre-tax Net Income / Capital Ratio	109.19%	121.10%
	Return on Assets	6.79%	7.67%
	Return on Equity	12.74%	14.62%
	Net Income (Loss) Ratio	8.78%	9.16%
	Net Income(Loss) Per Share	\$7.52	\$8.02

### 4. R&D Updates

PTI has been constantly devoted to new technologies and production technologies development to meet industry standards and customer demands. In addition to DRAM and NAND Flash products, PTI has been developing advanced packaging and testing technologies, such as Lead-Free Bump, Copper Pillar Bump, FCCSP, FCBGA, Hybrid CIS, SiP, 3DIC(TSV), BiO CSP(TSV) to provide PTI solid foundation for developing advanced Logic customers.

2019 R&D expenses were about NT\$1.91 billion which was equivalent to 2.86% of consolidated revenue. PTI has been aggressively investing in the research and develop of 3DIC (TSV), CIS CSP, Fan-Out Panel-Level Packaging (FOPLP), and Antenna in Package (AiP). PTI also set up a RF Lab to provide solutions for 5G communication, AIoT, Automotive, Networking, High Performance Computing (HPC), and AR/VR.

## II. 2020 Operations Plans

### 1. Plan Outlines:

- (1) Promise, Technology and Integration are our core values.
- (2) Focus on the assembly and final testing sectors in semiconductor industry in order to generate the profits together with our customers and vendors.
- (3) Devoted to the research and development of advanced technologies and launch new products to enhance corporate growth momentum.
- (4) Provide full services to customers with quality and exquisite technologies.
- (5) Integrated corporate resources to enhance operation performances and ensure corporate profitability and sustainability.
- (6) Provided employee trainings to talent, addressed employee benefits and interest of shareholders to create mutual benefits.

### 2. Sales Forecast Volume:

According to The World Semiconductor Trade Statistics (WSTS), global semiconductor market revenue will reach US\$426.0 billion in 2020, increase 4.8% from 2019. Based on

an estimation of Industry, Science and Technology International Strategy Center of Industrial Technology Research Institute (ISTI of ITRI), 2020 production value for Taiwan IC industry will grow around 7.0%. 2020 semiconductor industry outlook is more optimistic than 2019, with growth in both global and Taiwan market.

Despite a 38% sales decline in 2019, the DRAM market remained the largest of all IC product categories, according to IC Insights. The NAND flash market fell 32% in 2019. The sum of DRAM and NAND flash memory categories accounted for about 29% of total IC market in 2019. Memory market expects to rebound 17% in 2020 based on ISTI study which is higher than the average growth of overall semiconductor market. The 2020 DRAM and NAND flash market forecast to increase 13% and 32% accordingly to reach US\$70.8 billion and US\$58.0 billion. Based on IC Insights study, 36% of end application belonged to communication, followed by computer and consumer.

The deployment of 5G and related AI demands will be the major growth drives for the coming years. Global electronic device shipment, including PC, tablet and mobile phone, will increase 0.8% to reach 2.16 billion units in 2020 as Gartner pointed out. DIGITIMES Research estimated global smartphone shipments for 2020 will grow again to reach 1.4 billion units, increase 4.3% from 2019. Global data center market size is estimated to grow 10% to hit US\$206.2 billion in 2020.

However, the ongoing disputes between U.S. and China play a major uncertainty to slow down the global economy. China is the biggest consumer for semiconductor products. China's effort on building a self-sufficient semiconductor supply chain post a high risk of balancing supply and demand. These risks disrupt fair competition for existing manufacturers.

PTI projects good 2020 revenue growth in DRAM, NAND Flash, Logic, and advanced packaging.

2020 Sale forecast volume:

<b>Item</b>	<b>Sale Forecast Volume</b>
Assembly	12.5 billion packages
Final Test	8.0 billion packages
Bumping	900 K wafers
CP	2.5 million wafers
SSD+SiP	95.0 million pieces

### 3. Production and Marketing Policies:

- (1) Provide the turn-key and drop-shipment services to customers to reduce the cycle time and save on the transportation costs.
- (2) Increase the revenue weight from commodity DRAM, Mobile DRAM, NAND Flash, UFS, and Logic products.
- (3) Continue developing Logic business and enhancing technology development for Flip-Chip, Solid State Drive (SSD), Wafer Level Packaging (WLP), Chip Probing (CP), and Fan-Out Panel Level (FOPLD) to create business growth.
- (4) Developing new customers, new markets, and new products at the same time enhancing the relationship with existing customers.
- (5) Improve corporate competitive advantages by cost reduction and resources integration.

Chairman: D.K. Tsai

President: J.Y. Hung

Head of Accounting: Evan Tseng