
2019Q1~Q3 Operation Briefing of Nan Ya PCB Corp.

December 4th, 2019



Disclaimer

The description of historical events might include the information that was not reviewed by accountants. Thus, it might be insufficient to fully exhibit the financial status or operation results of Nan Ya PCB Corp.

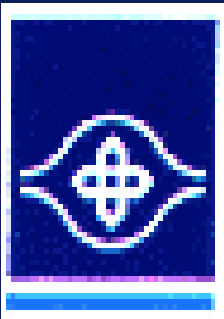
The actual operation results, financial status, and sales outlook in the future might be different from what will be indicated or implied in this meeting. The reasons may be including but not limited to the market demand, price fluctuation, competition dynamic, global economy, supply-chain, foreign exchange rate, and other risks that the Company cannot control.

Except as required by law, we undertake no obligation to update any forward-looking statement, whether as a result of new information, future events, or otherwise.



Agenda

- **Company Profile**
- **Financial Status**
- **Future Product Development**
- **Operational Goals**



Company Profile

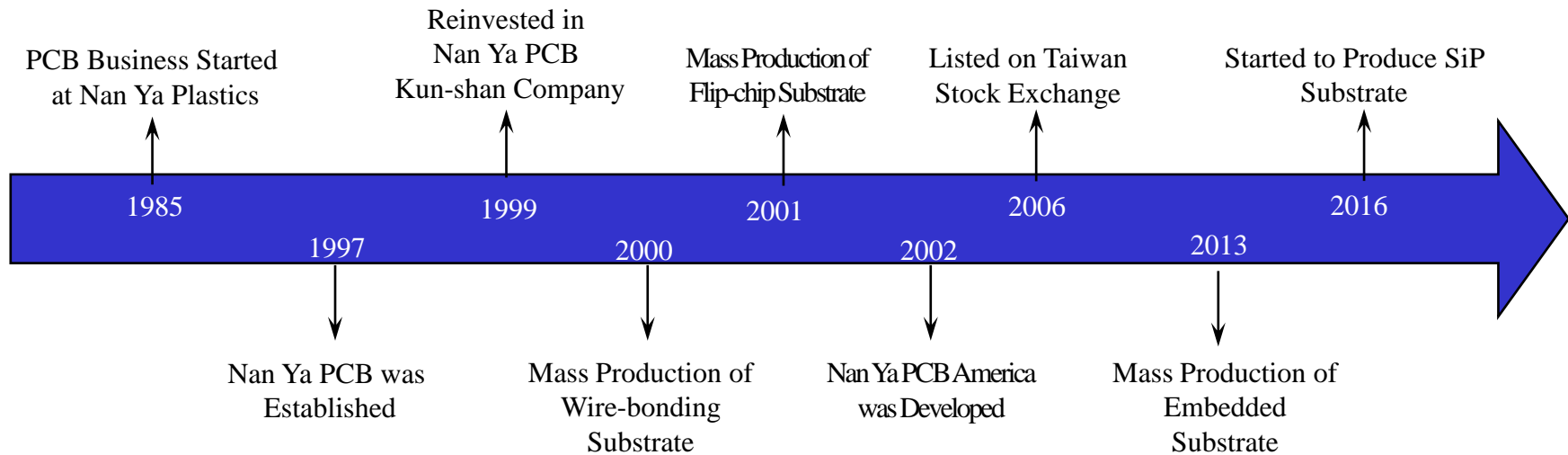
Business Overview

- **Subsidiary Company of Nan Ya Plastics Corp.**
- **Manufacture and Sell PCBs and IC Substrates**
- **2019 Q1~Q3 Consolidated Revenues: NTD 22.3 Billion**
- **Market Value: NTD 32.7 Billion(September 27th, 2019)**
- **Production Locations : Taiwan and China**



Company Profile

Milestone

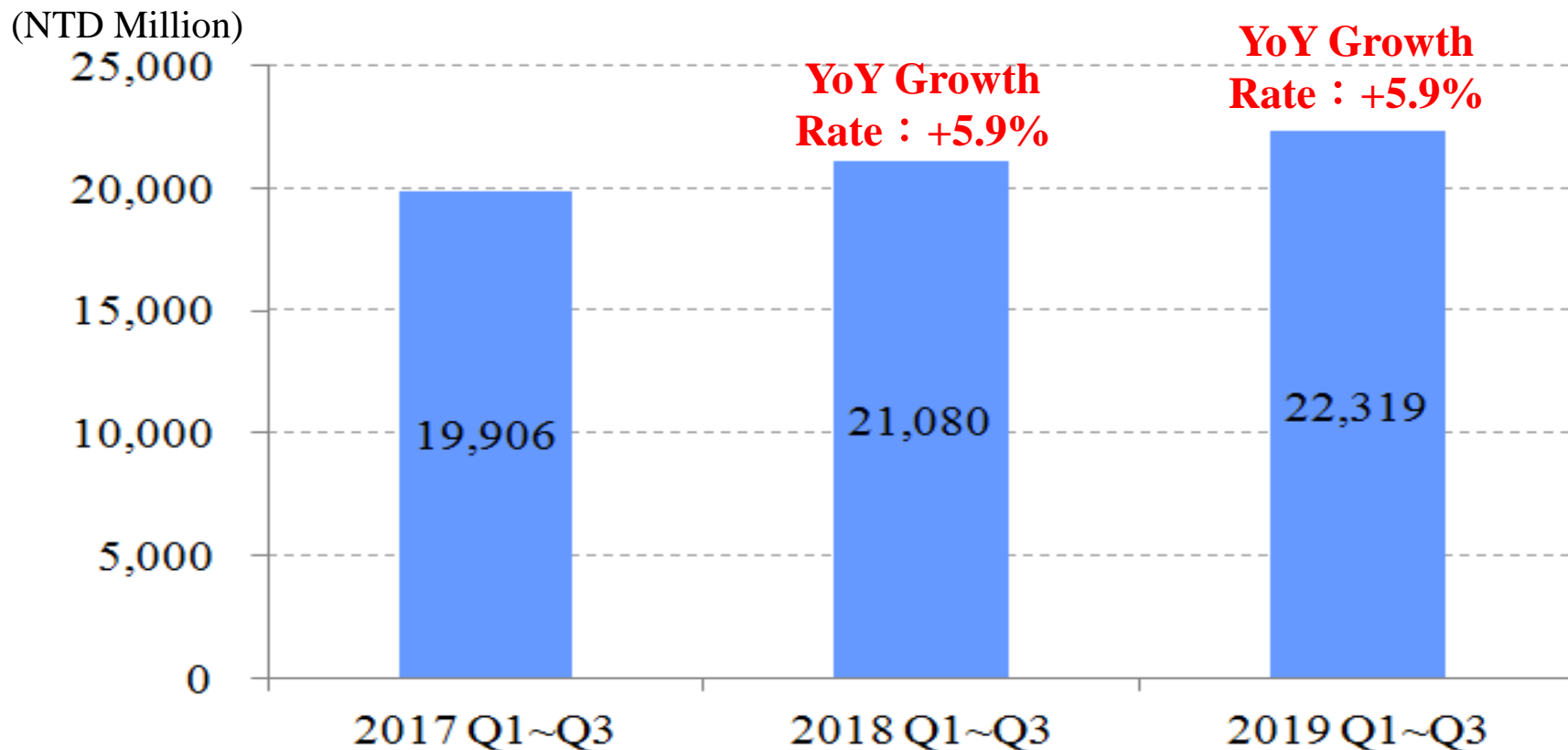


- **1985 : PCB business unit was formed at Nan Ya Plastics Corp. and started manufacturing PCBs**
- **1997 : Approved by the Board of Nan Ya Plastics, Nan Ya PCB Corp. was established via reinvestment**
- **1999 : Reinvested Nan Ya PCB Kun-shan Company with capital of USD29.8 million**
- **2000 : Started manufacturing wire-bonding substrates**
- **2001 : Upgraded technologies and produced flip-chip substrates**
- **2002 : Established Nan Ya PCB America Corp.**
- **2006 : Listed on Taiwan Stock Exchange with ticker 8046 TT**
- **2013 : Upgraded technologies and produced Embedded substrates**
- **2016 : Started to produce System in Package (SiP) substrates**



Financial Status

Consolidated Revenues(IFRS) in Last 3 Years



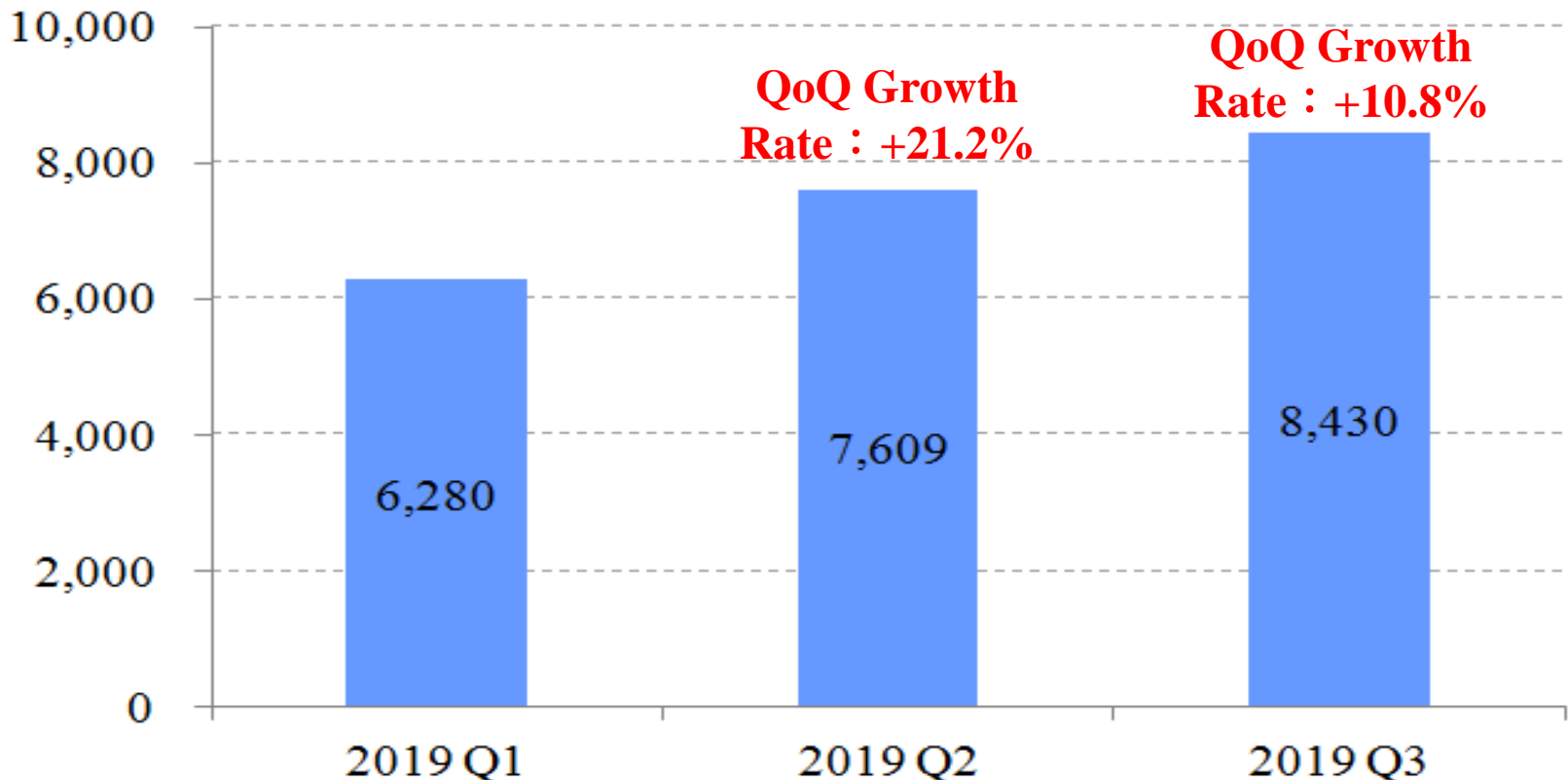
- **Revenues in 18Q1~18Q3 were 5.9% greater than those in 17Q1~17Q3:**
Because of rising demand in high value telecom and wearable devices, the revenues of 18Q1~18Q3 were greater than 17Q1~17Q3.
- **Revenues in 19Q1~19Q3 were 5.9% greater than those in 18Q1~18Q3:**
Nan Ya PCB was benefited from better demand of high-end telecom customers. The revenues of 19Q1~19Q3 were greater than 18Q1~18Q3.



Financial Status

Consolidated Revenues(IFRS) in Last 3 Quarters

(NTD Million)



- **Revenues in 19Q2 were 21.2% greater than those in 19Q1:**

Because of significant increases in telecom demands, the 19Q2 sales grew 21.2% from 19Q1.

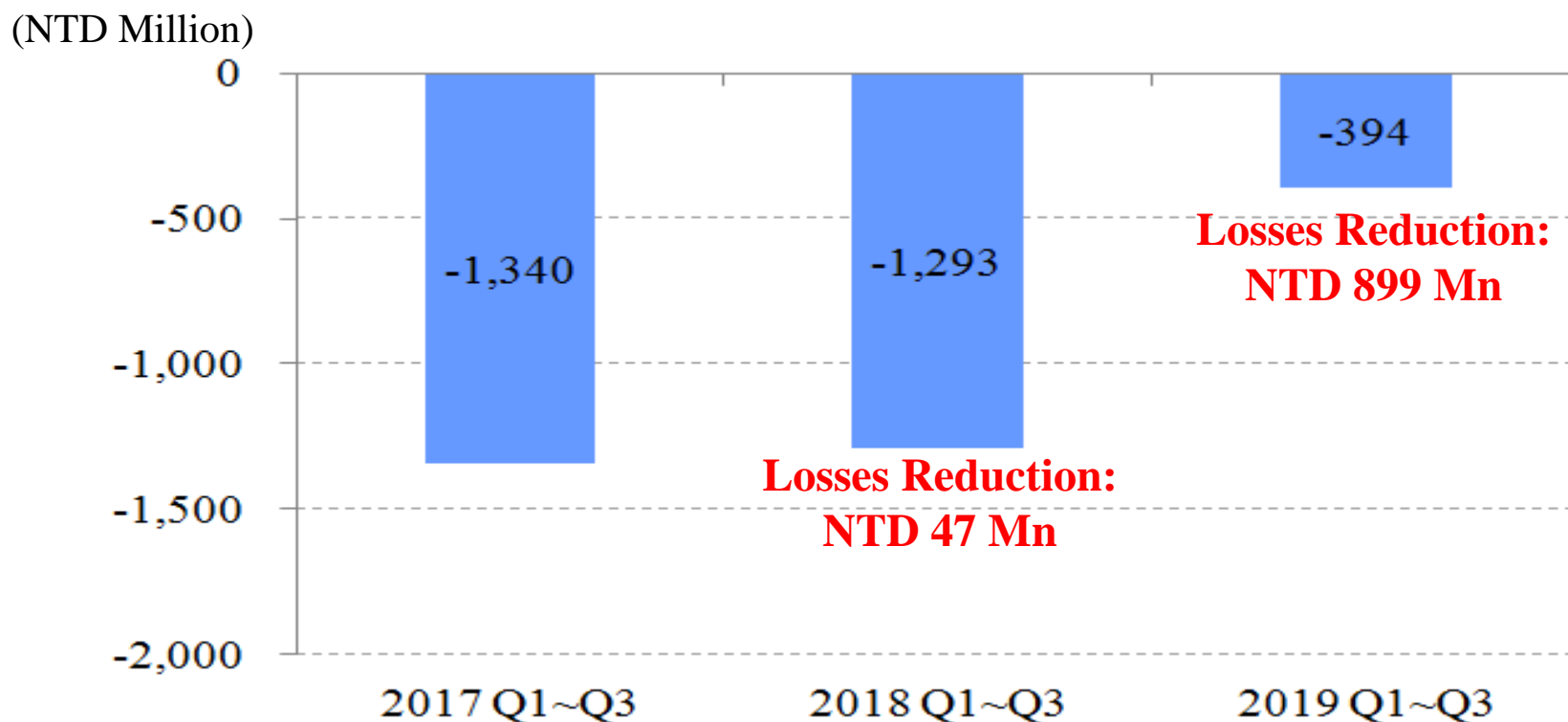
- **Revenues in 19Q3 were 10.8% greater than those in 19Q2:**

Helped by resuming demand in SiP substrates and continuously strong 5G telecom, AI, and HPC product sales, 19Q3 sales kept growing.



Financial Status

Operation Profits(Losses) in Last 3 Years



- **Operation losses in 18Q1~18Q3 were narrowing NTD 47 Mn from 17Q1~17Q3:**

Nan Ya PCB improved the product mix by actively rolling out more high value products. Thus, the operational losses in 18Q1~18Q3 kept decreasing from 2017.

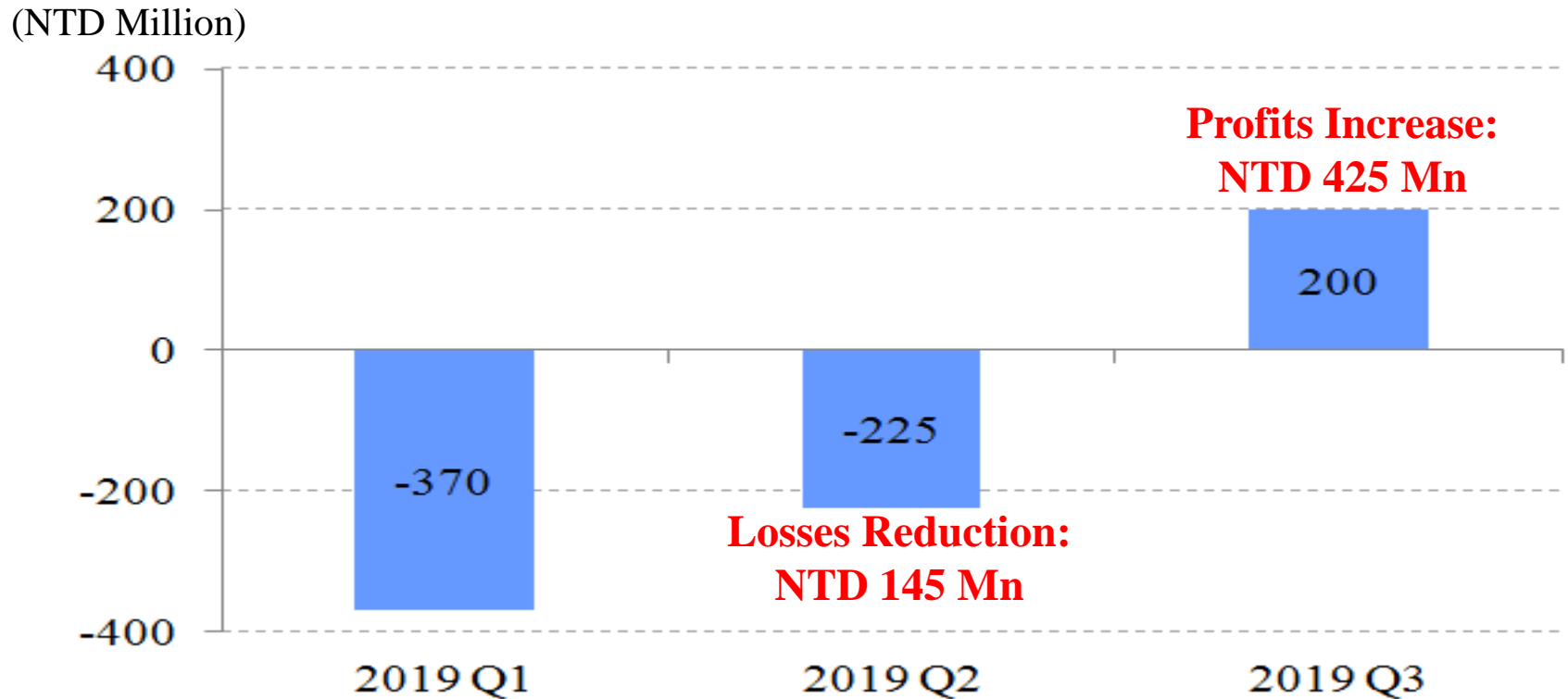
- **Operation losses in 19Q1~19Q3 were narrowing NTD 899 Mn from 18Q1~18Q3:**

Nan Ya PCB closely collaborated with telecom clients, and the high-end telecom products shipments continued to grow. Thus losses of 19Q1~Q3 were less than 18Q1~Q3.



Financial Status

Operation Profits(Losses) in Last 3 Quarters



- **Operation losses in 19Q2 were narrowing NTD 145 Mn from 19Q1:**

The 19Q2 operation losses were less than 19Q1 because of better utilization rate resulted from the increasing 5G telecom demands.

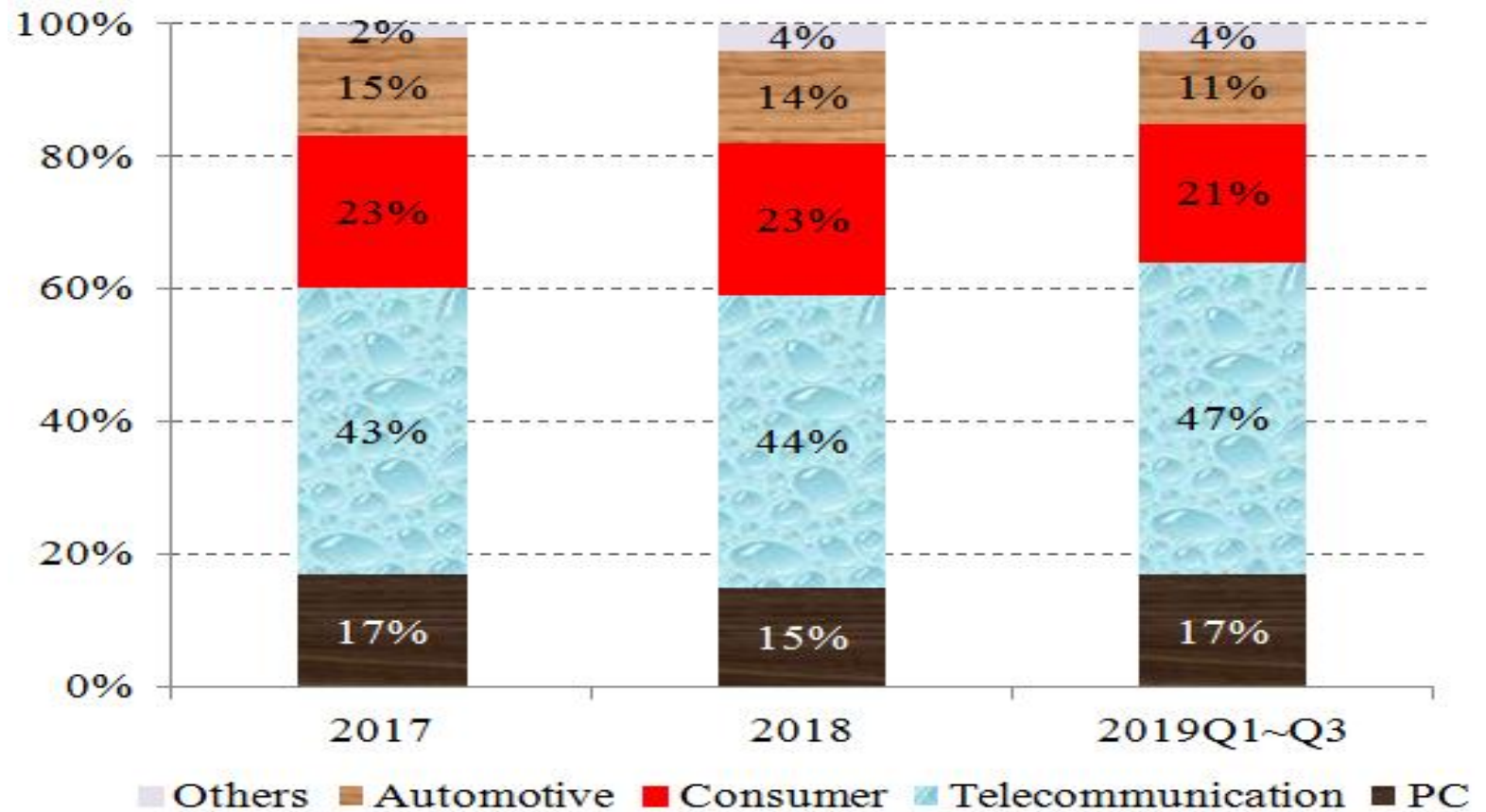
- **Operation profits in 19Q3 were increasing NTD 425 Mn from 19Q2:**

The 19Q3 operation profits were greater than 19Q3 because of increasing sales in high value products such as SiP and telecom substrates. Also, ongoing manufacturing process enhancement projects improved yield rates. Thus 19Q3 has become profitable.



Financial Status

Revenue Structure(By Applications 1/2)

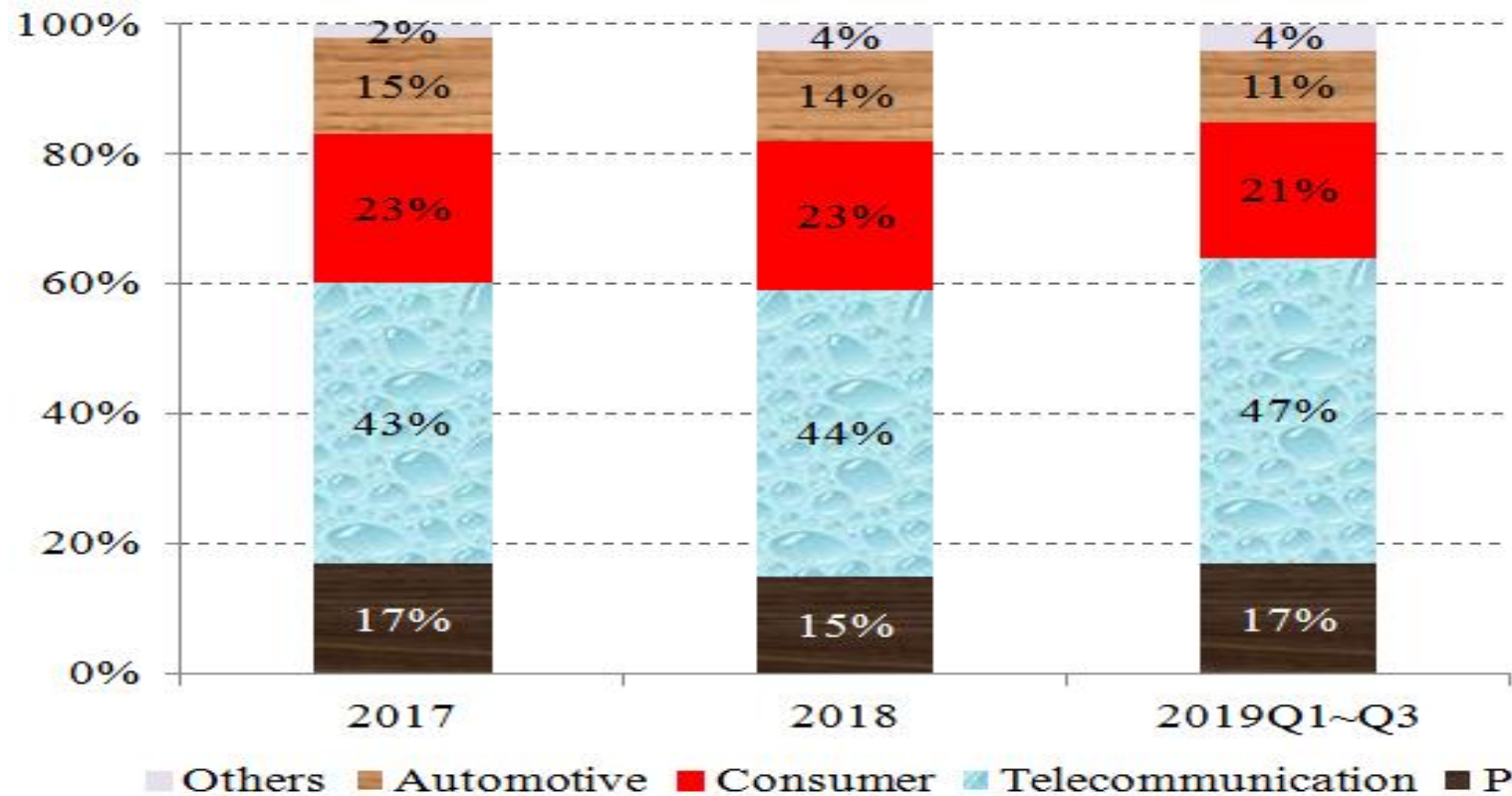


- 2019Q1~Q3 PC and telecom contributions grew because of the joint efforts of the Company and clients and the expansion of our clients' market share.
- Impacted by weak performances of TVs and game consoles, the consumer electronics' contribution declined.



Financial Status

Revenue Structure(By Applications 2/2)



- Because of the dispute between the U.S. and China, global economy has been lucrative and triggered weak sales in automobile market. Thus 19Q1~Q3 automotive PCB's contribution declined.
- Cryptocurrency booming in 2018H1 boosted our cryptocurrency mining product demand, which has been experiencing a significant drop since 2018H2; however, the Company devoted to develop AI and HPC products. Others' 19Q1~Q3 contribution remained the same.



Future Product Development

Continue to Expand High Value Products

■ 5G Telecommunication Equipment

We will continue the collaboration with clients in 2020 and increase the production of high layer counts and large body size telecom products to boost the average selling price and profit.

■ SiP Substrate

With the ongoing evolvments in high-end assembling technologies, SiP substrates are applied to mobile, wearable devices, and camera modules to meet the electronics trend of light, thin, short, and small. Our SiP substrate shipments are expected to grow.

■ HDI

With the increasing design complexity of automobiles, TWS, NBs, and high end SSDs, more HDI will be applied to these fields. Thus, we will expand HDI contributions and capacities to fulfill market demands.

■ AI/HPC

Because the designs of AI/HPC application chips are sophisticated and they require high-end IC substrates with high layer counts and excellent heat dissipation. The continuing development in AI/HPC would drive IC substrate demands and stabilize the prices.



Operational Goals

The Company Seeks Becoming Operation Profitable

■ 19Q3 Has Turned Profitable

The shipments of high layer counts and large body size IC substrates grew stably. In addition, ongoing manufacturing enhancements have been implemented, enabling better yield rates. Thus, our operation became profitable in 19Q3 and the 19Q1~19Q3 pre-tax profits were in black ink.

■ 19Q4 Product Mix and Yield Rate Continue to Be Improved

The demands of high layer counts and large body size IC substrates remain strong due to 5G infrastructure development, and the product mix will be enhanced. Also the yield rate has increased stably.

■ To Seek Growing Profits in 2020

Sales Expansion: The 5G and AI/HPC are expected to drive the growing demands in high layer counts and large body size IC substrates. Besides, the trend of the heterogeneous integration continues, and this will enable the SiP substrates to grow.

Costs Reduction: NY PCB will continue to enhance the manufacturing processes and adopt AI and advanced production technologies to improve the yield rates. Additionally, the work force and material improvement projects are ongoing to lower the manufacturing costs.



Thank You

