
2021 Operation Briefing of Nan Ya PCB Corp.

March 3rd 2022



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.

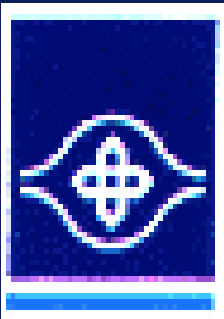
The actual operation results, financial status, and sales outlook in the future might be different from what will be indicated or implied in this meeting. The reasons may be including but not limited to the market demand, price fluctuation, competition dynamic, global economy, supply-chain, foreign exchange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

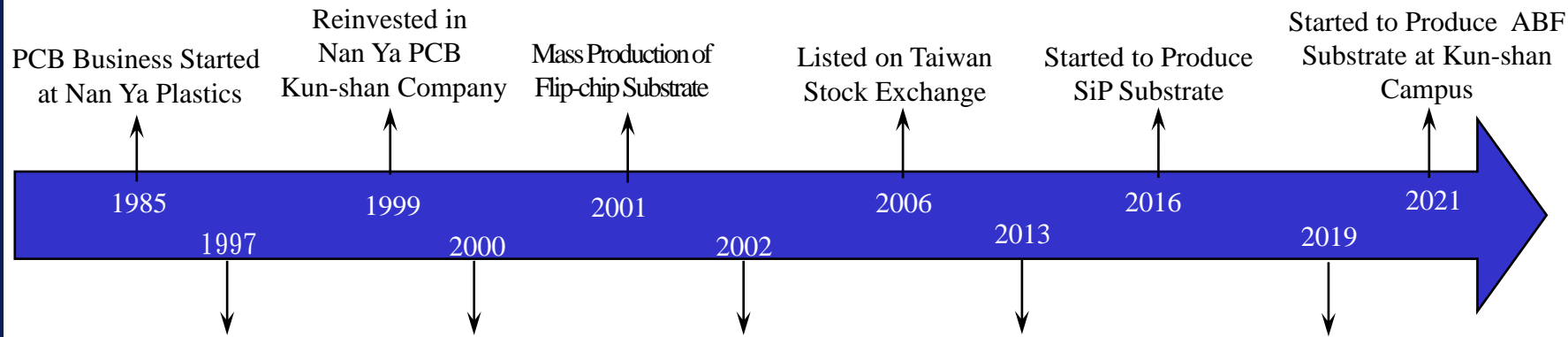
Business Overview

- **Subsidiary Company of Nan Ya Plastics Corp.**
- **Manufacture and Sell IC Substrates and PCBs**
- **2021 Consolidated Revenues: NTD 52.2 Billion**
- **Market Value: NTD 369.6 Billion(December 30th 2021)**
- **Production Locations : Taiwan and China**



Company Profile

Milestone

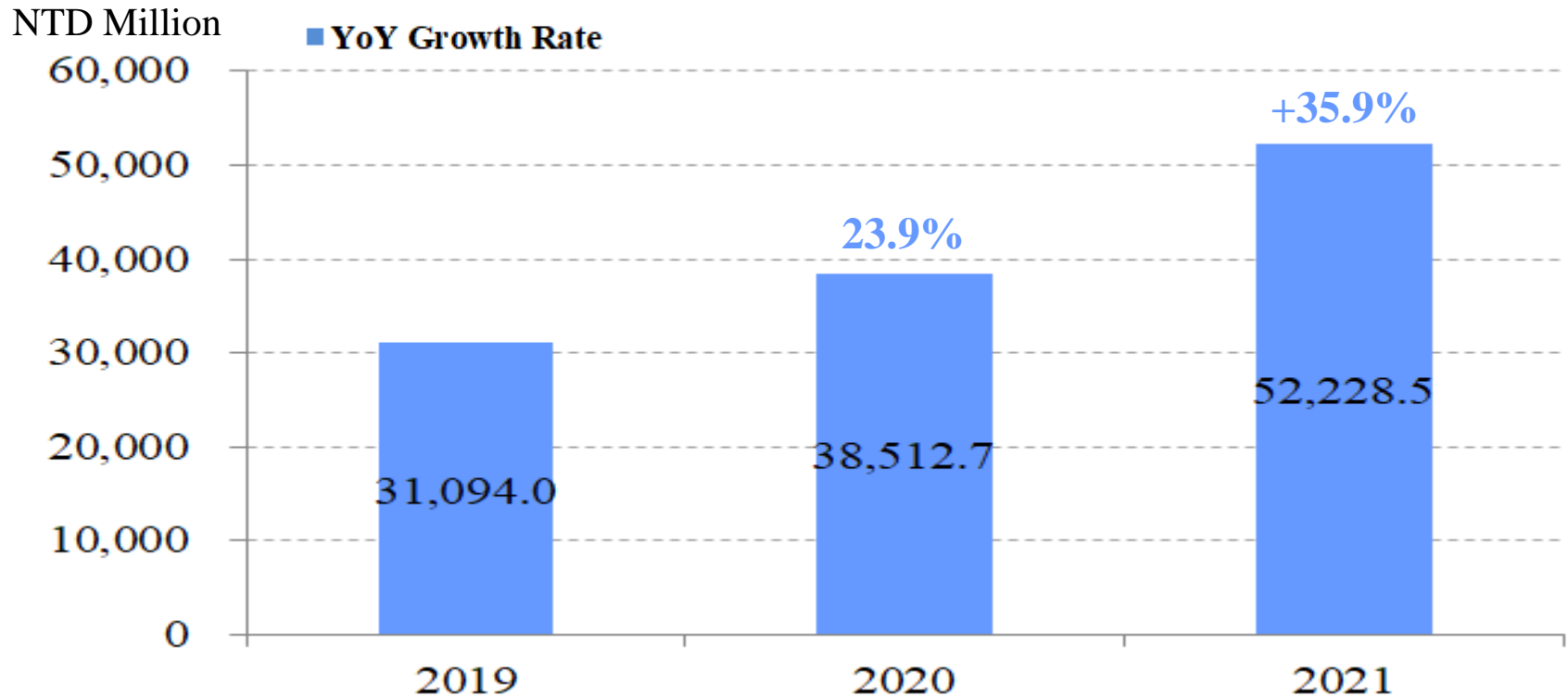


- **1985 : PCB business unit was formed at Nan Ya Plastics Corp. and started manufacturing PCBs**
- **1997 : Approved by the Board of Nan Ya Plastics, Nan Ya PCB Corp. was established via reinvestment**
- **1999 : Reinvested Nan Ya PCB Kun-shan Company with capital of USD29.8 million**
- **2000 : Started 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**
- **2019 : In response to market demand, Nan Ya PCB Corp. started to build ABF substrate production line at Kun-shan Campus**
- **2021 : Kun-shan Campus started to manufacture ABF substrates**



Financial Status

Consolidated Revenues(IFRS) in Last 3 Years



- **Revenues in 2020 were 23.9% greater than those in 2019:**

Nan Ya PCB was an early entrant in high-end telecom and SiP substrate fields and benefited from the increase in customer demands, and the 2020 revenues grew significantly from 2019.

- **Revenues in 2021 were 35.9% greater than those in 2020:**

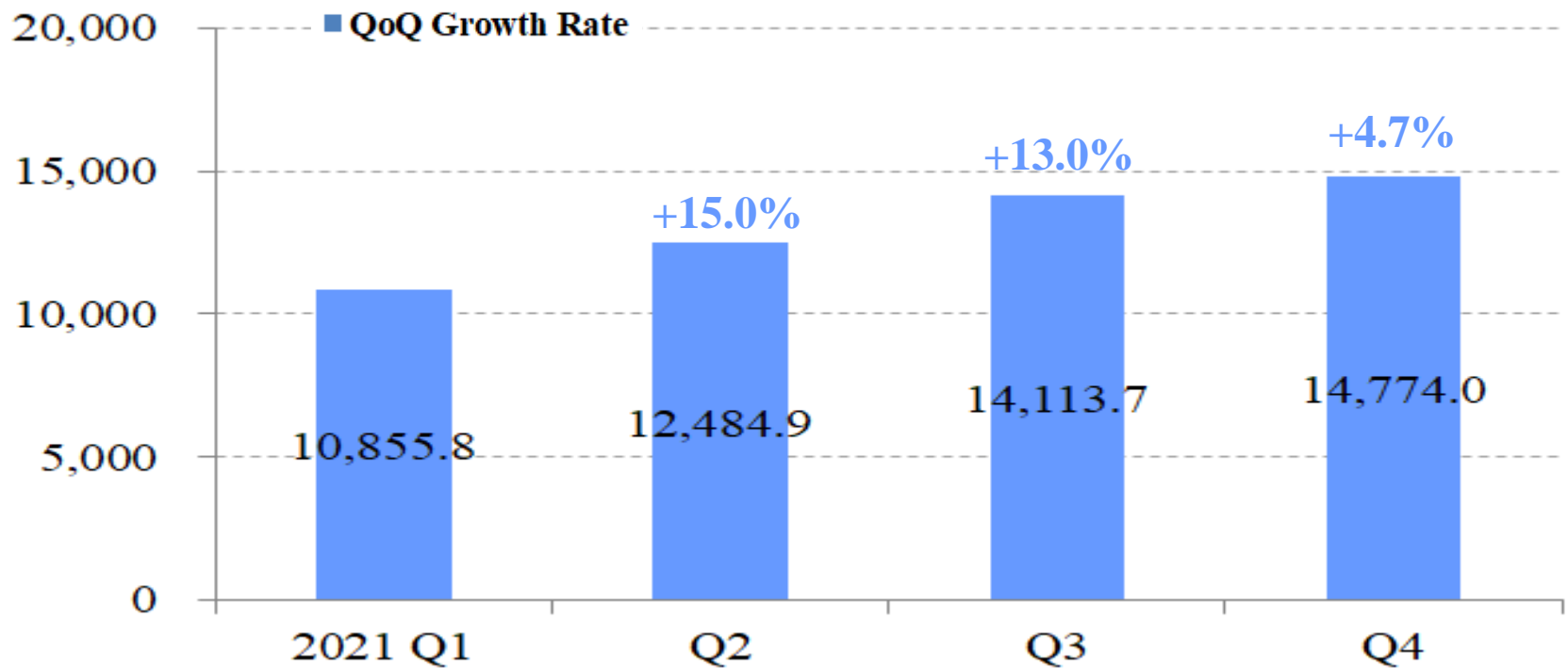
Nan Ya PCB was helped by the better IC substrate sales in high-end PC, telecom, AI, and HPC products, and the 2021 performance was better than that in 2020.



Financial Status

Quarterly Consolidated Revenues(IFRS) in a Year

NTD Million



■ **Revenues in 21Q2 were 15.0% greater than those in 21Q1:**

Due to the contribution from better product mix and the new IC substrate capacities at Kunshan Campus, revenues in 21Q2 increased from 21Q1.

■ **Revenues in 21Q3 were 13.0% greater than those in 21Q2:**

Due to rising high value product sales ratio and the traditional sales peak season, revenues in 21Q3 continued to grow from 21Q2.

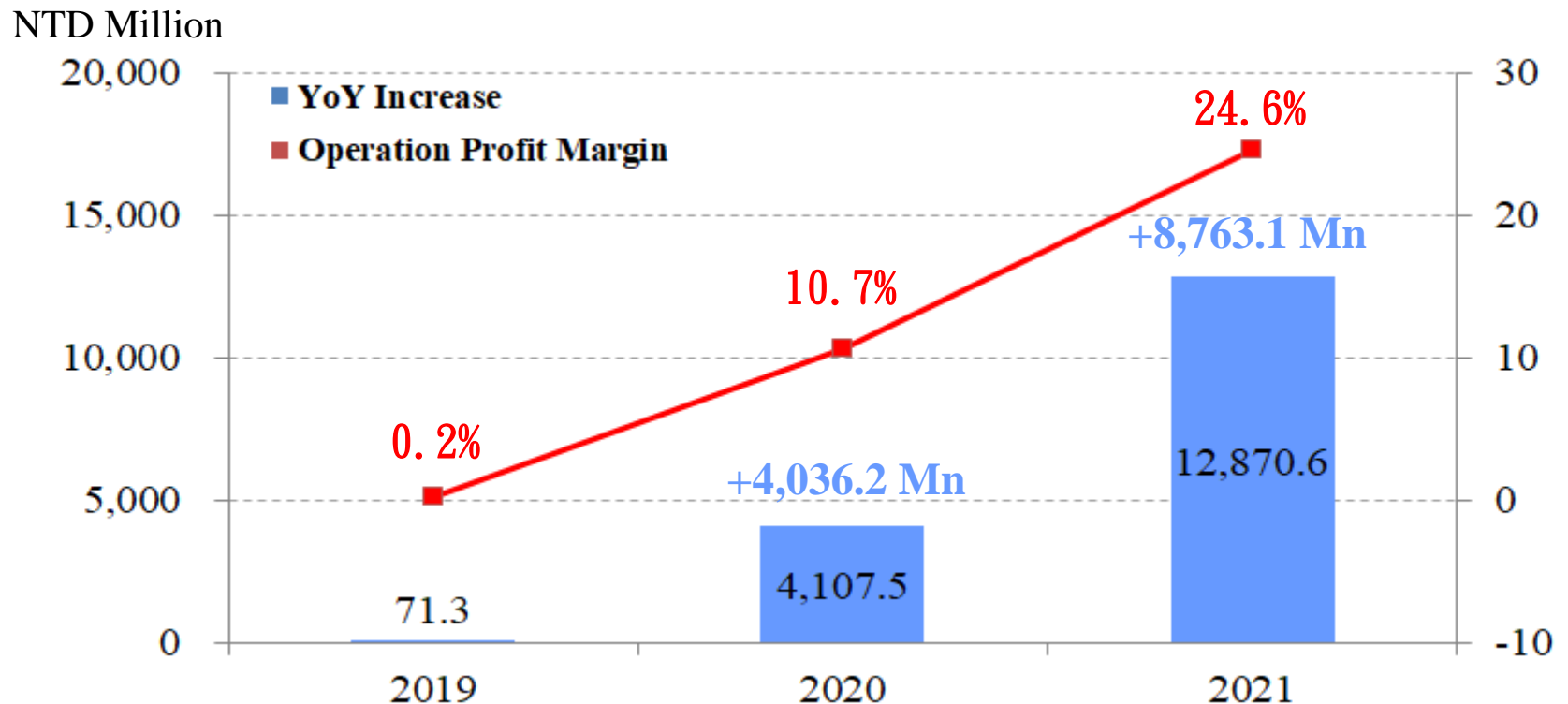
■ **Revenues in 21Q4 were 4.7% greater than those in 21Q3:**

Because the sales of the high-end IC substrates maintained strong in 21Q4, the revenues kept growing regardless of the slow season.



Financial Status

Operation Profits in Last 3 Years



- **Operation profits in 2020** were increasing NTD 4,036.2 Mn from 2019:

The 2020 operation profits and margin grew every season because of yield rate improvement and better product mix due to more high-end telecom products.

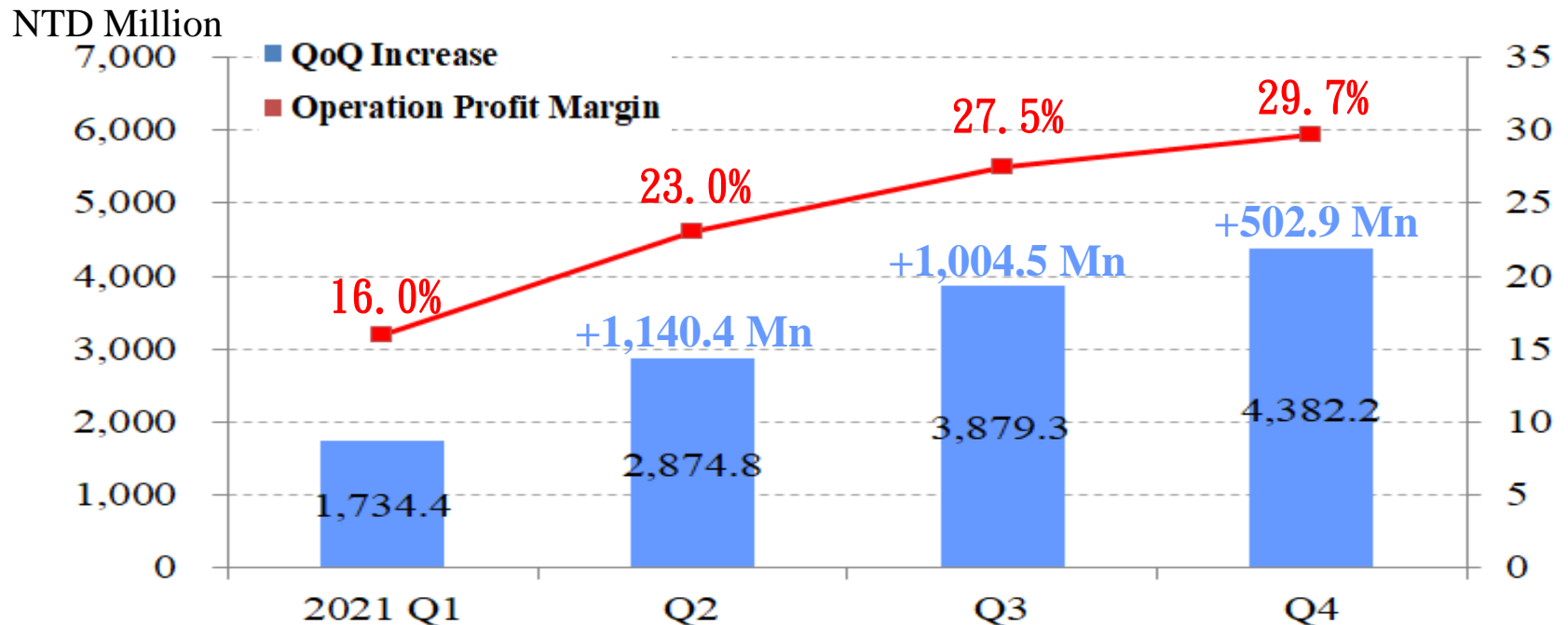
- **Operation profits in 2021** were increasing NTD 8,763.1 Mn from 2020:

In addition to the contribution from the better product mix and the new IC substrate capacities at Kunshan Campus, we applied AI to manufacturing management to improve the yield rate and efficiencies to boost operation profits and margin.



Financial Status

Quarterly Operation Profits in a Year

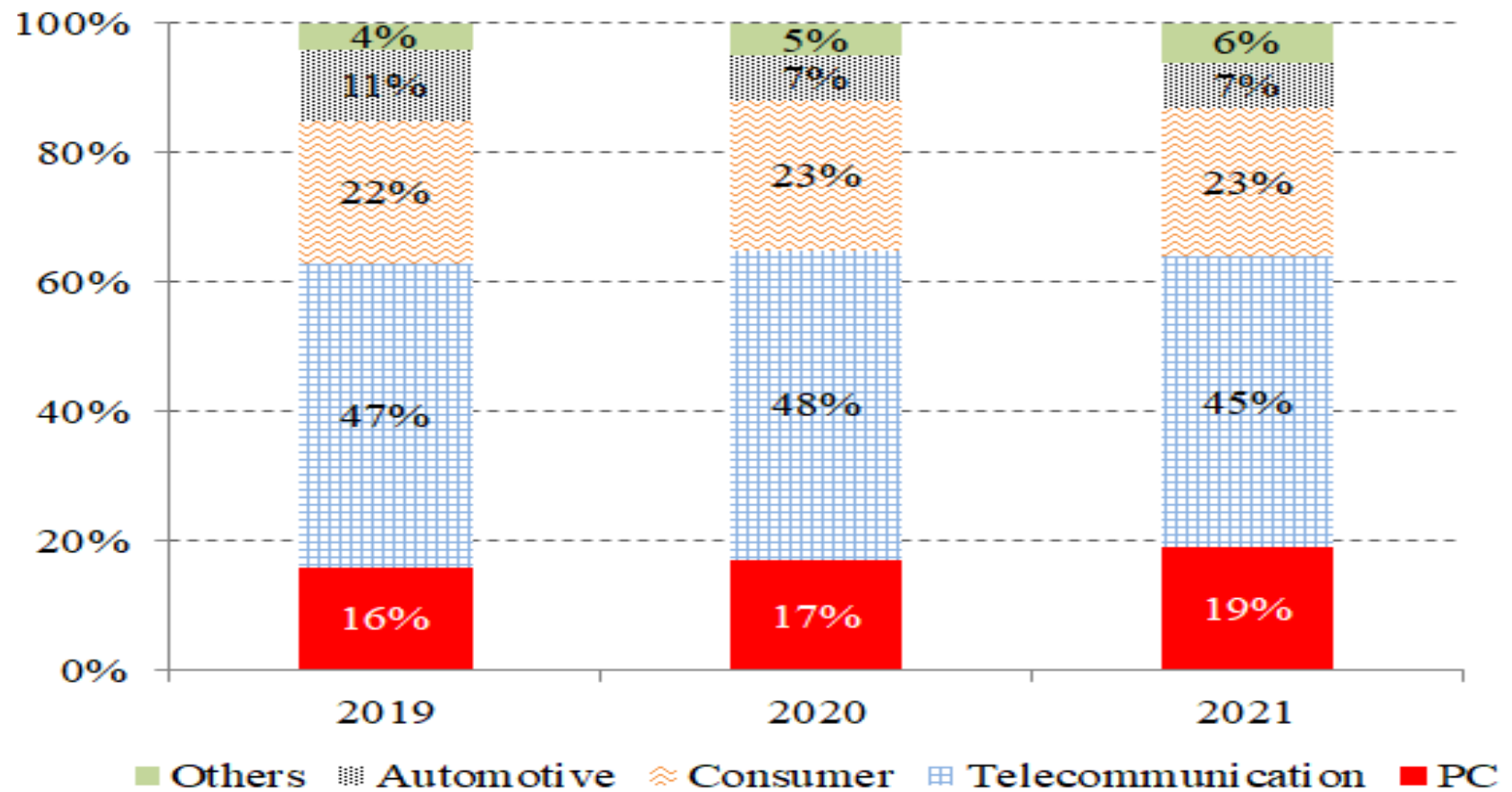


- **Operation profits in 21Q2 were increasing NTD 1,140.4 Mn from 21Q1:**
Growing Profits can be attributed to the new IC substrate capacities at Kunshan Campus and the better product mix.
- **Operation profits in 21Q3 were increasing NTD 1,004.5 Mn from 21Q2:**
The rising utilization rate and better high-value product sales ration have driven 21Q3 profits increasing.
- **Operation profits in 21Q4 were increasing NTD 502.9 Mn from 21Q3:**
Because of better sales in high value products, such as telecom, AI, and HPC substrates, operation profits continued to grow.



Financial Status

Revenue Structure(By Applications)

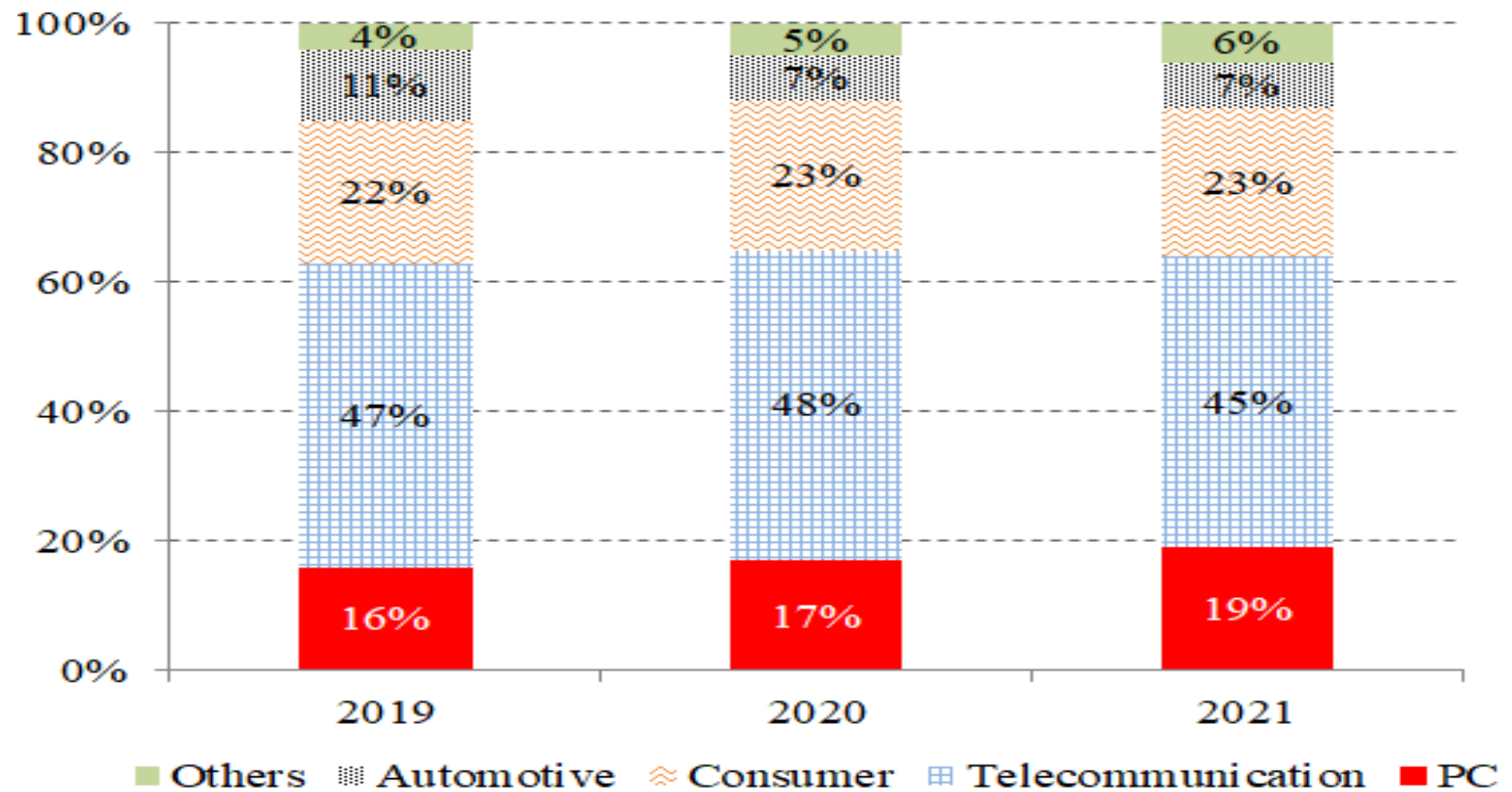


- Because of better demands in PCs products driven by data centers, work from home, and stay at home entertainment related revenue ratios in 2021 grew from 2020.
- Base stations were impacted by the COVID-19 and the demands were delayed, causing lower telecom sales ratio in 2021.



Financial Status

Revenue Structure(By Applications)



- The sales ratio of automotive and consumer electronics remained flat in 2021. Despite of lower sales ratios, those revenues were still growing because of the greater revenue base.
- Nan Ya PCB has won more AI and HPC product orders. Thus, the revenue ratio of others continued to grow in 2021.



Future Product Development

Continue to Expand High Value Products

■ High-end ABF Substrate

We will keep enhancing manufacturing processes through the adoption of AI and big data and narrow the line width and space as well as the bump pitch. Also, through cross-strait capacity expansions, we could gain more market shares and will launch:

1. High-end substrates for 5G base stations and cloud servers.
2. High-end substrates for 5nm CPUs and 6nm GPUs.
3. Large area and high layer counts substrates for AI and APU ASICs.

■ High-end BT Substrate

The Company continues to enhance manufacturing processes and narrows the line width and space of MSAP. We will launch:

1. New generation SiP substrates for wearable devices, camera modules of smartphones, and optical sensors.
2. Substrates for transceivers of 5G small cell and network signal switches.
3. High-end automotive infotainment, MCU, and communication substrates.

■ HDI

As the designs of handset, consumer electronics, and automotive electronics are becoming sophisticated, the consumption of high value HDI is increasing. We will lift the sales ratio of high-end HDI and launch:

1. Motherboards of high-end PCs and accelerating cards for servers.
2. Consumption SSDs and memory modules.
3. Mini LED application products.



Operational Goals

Management Guidelines

- Continuing to implement the diversification strategy in products and clients to lower the risk of underperformance of single product or client.
- Cultivating R&D and manufacturing technology talents to enhance R&D power and add values in products.
- Participating in clients' product design, co-developing products, offering raw data, and sharing manufacturing information to shorten the delivery time.
- In response to the growing trend of 2.5D packaging, we will develop more high-end IC substrates to lift the sales ratio of high value products.
- Continuing to apply AI to operation and management, implementing intelligent production, and optimizing manufacturing conditions to improve the yield rate and efficiency.
- Will continue to increase IC substrate capacities and complete the cross-strait expansion on time to fulfill the demands from the U.S. and China based clients with the target of 100% utilization rate.
- Will continue to implement ESG projects, and set the SBT to reduce emission, as well as proceeding other projects of reducing power consumption and waste to fulfill corporate social responsibilities and circular economy.



Thank You

