# 2022 Q1~3 Operation Briefing of Nan Ya PCB Corp.



November 10<sup>th</sup> 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

■ 2022 Q1~3 Consolidated Revenues: NTD 46.9 Billion

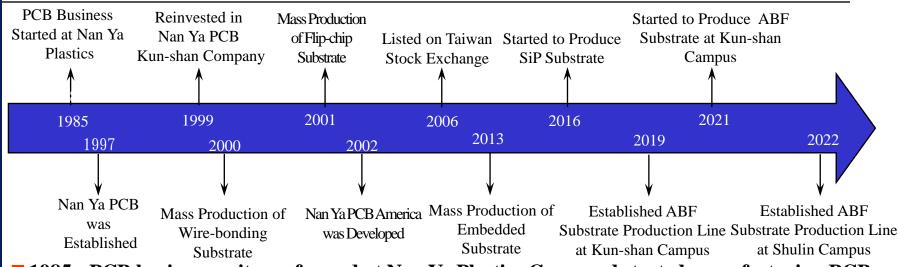
■ Market Value: NTD 122.1 Billion(September 30st 2022)



**■ Production Locations: Taiwan and China** 

# **Company Profile**

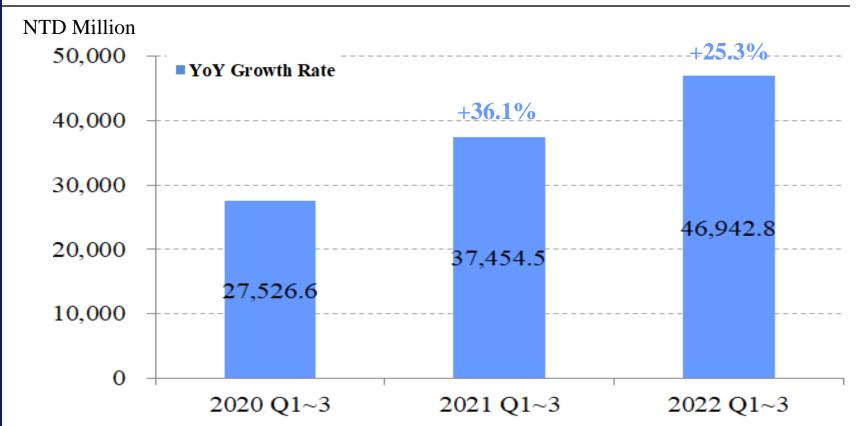
#### Milestone



- 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
- 2022 : Shulin Campus started to manufacture ABF substrates



#### H1 Consolidated Revenues(IFRS) in Last 3 Years





- Revenues in 2021 Q1~3 were 36.1% greater than those in 2020 Q1~3:

  Work from home and stay at home entertainment drove demands and lifted the Company's performance with a significant annual growth in revenues.
- Revenues in 2022 Q1~3 were 25.3% greater than those in 2021 Q1~3:

  Nan Ya PCB was helped by the increasing demands in 5nm PC CPU and SiP application IC substrates, and the revenues grew annually.

#### **Quarterly Consolidated Revenues(IFRS) in a Year**





Because of fewer working days, the 22Q1 revenues declined from 21Q4.

■ Revenues in 22Q2 were 4.3% greater than those in 22Q1:

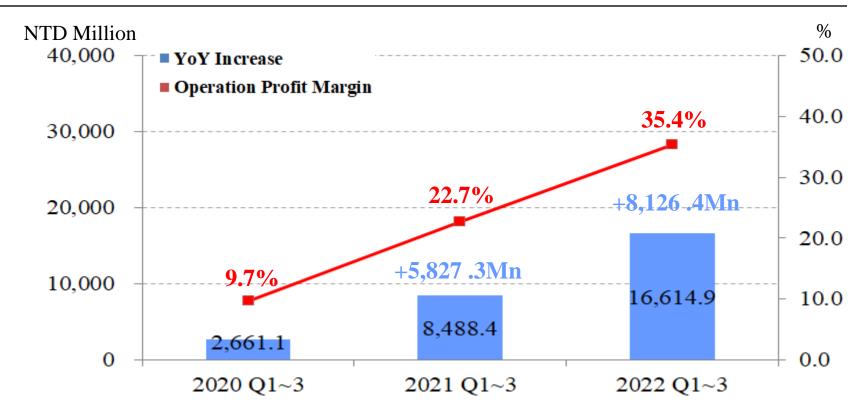
Better product mix led by increasing high value product sales offset the impacts of Kunshan lockdown in April and pandemic outbreak in May, and enabled quarterly revenue growth.

■ Revenues in 22Q3 were 13.2% greater than those in 22Q2:

22Q3 revenues were helped by the launch of 5nm PC CPU substrates and showing strong QoQ growth.



#### Q1~3 Operation Profits(Losses) in Last 3 Years





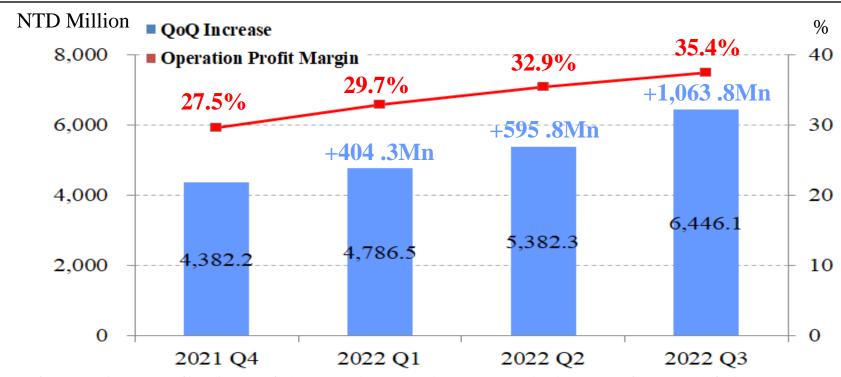
■ Operation profits in 2021 Q1~3 were increasing NTD 3,226.2 Mn from 2020 Q1~3:

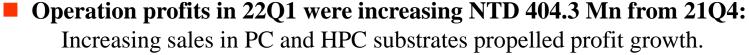
In addition to the contribution from the better product mix and the new IC substrate capacities at Kunshan Campus, we applied AI to manufacturing management to improve the yield rate and efficiencies to boost operation profits and margin.

Operation profits in 2022 Q1~3 were increasing NTD 5,559.5 Mn from 2021 Q1~3:

The high values product sales was increasing because of better output led by debottleneck and higher manufacturing efficiency, which greatly lifted the profits.

#### **Quarterly Operation Profits in a Year**



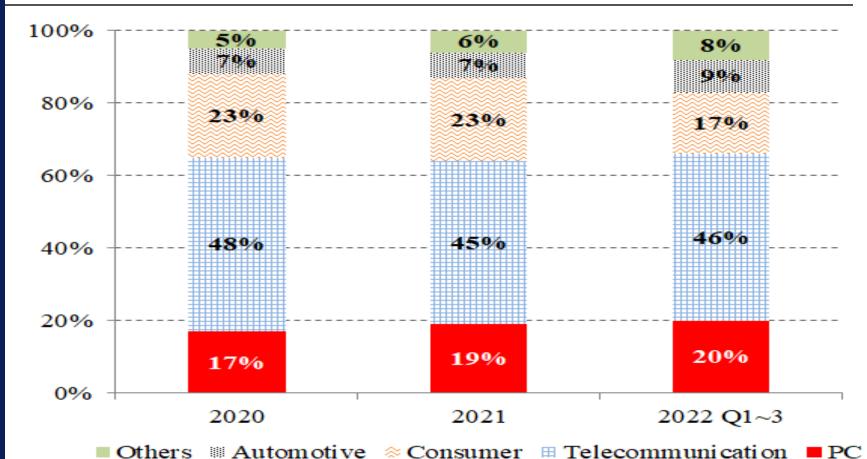


- Operation profits in 22Q2 were increasing NTD 595.8 Mn from 22Q1:

  In addition to better large area and high layer count IC substrates sales, the adoption of AI in manufacturing improved efficiencies and yield rate and lifted profits.
- Operation profits in 22Q3 were increasing NTD 1,063.8 Mn from 22Q2: Because of the contribution from the 5nm PC CPU substrates, 22Q3 profits were greatly growing from 22Q2.

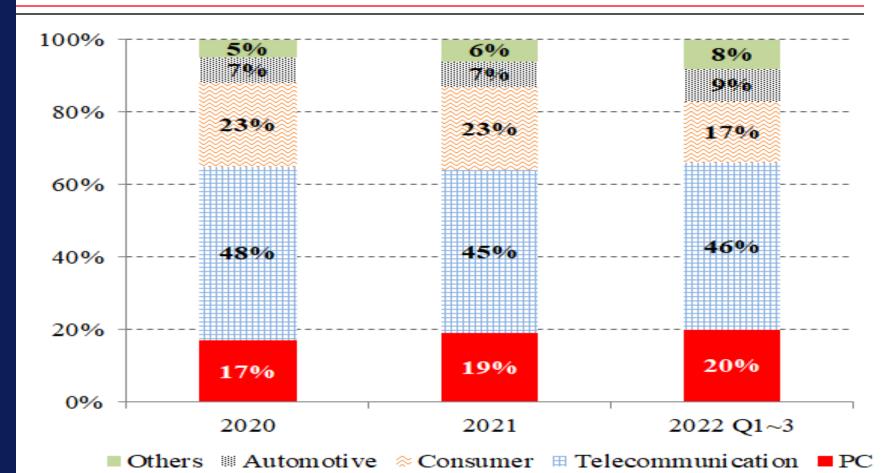


#### **Revenue Structure(By Applications)**



- ×
- Because of the launch of 5nm CPU and recovery in telecom equipment, the PC and telecom product revenues grew in 2022 Q1~3.
- Due to changes in consumption behaviors and the severe inflation, consumer electronics related revenue ratios was declining in 2022 Q1~3.

#### **Revenue Structure(By Applications)**





- Evs and better penetration rate of automotive electronics drove the demands in automotive PCBs. The related sales ration grew in 2022 Q1~3.
- Nan Ya PCB actively explored the AI and HPC fields and successfully gained more high value orders from those areas. Thus, the revenue ratio of others continued to grow.

# **Future Product Development**

#### **Continue to Expand High Value Products**

#### ■ ABF Substrate

In 2023, we will continue to collaborate with clients to develop application substrates for 5nm PC CPU, servers and switches of datacenters, and 5G base stations. Also, we will keep enhancing advanced manufacturing processes in Taiwan to produce more larger body size, high layer count, and fine line ABF substrates. Besides, Kunshan Campus is going to start the mass production of high-end substrates to fulfill the local customers' demands.

#### **■** BT Substrate

Given the trend of heterogeneous integration remains, we will develop new generation SiP substrates for mobile device. Also to meet the rapidly growing datacenter and automotive electronics markets, we will produce substrates for 5G optical communication modules, networking switches, automotive network, and automotive infotainment systems.



#### Conventional PCB

As the designs of handset, consumer electronics, and automotive electronics are becoming sophisticated, the consumption of high value HDI is increasing. Thus, we will produce interposers for new generation 5G smartphones as well as HDIs for sever SSDs, LED, autonomous cars, and ADAS to improve the product mix.

#### **Operational Goals**

#### **Management Guidelines**

- Cultivating R&D and manufacturing technology talents to enhance R&D power develop new materials and technologies to improve manufacturing capabilities and yield rates, 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/3D 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.
- Expanding cross-strait high-end IC substrate capacities to boost the output of high value products and maintain our competitive edges and respond to the U.S. and China semiconductor trends.
- Implement ESG projects, and set STB target to fulfill corporate social responsibilities.
  - $\triangleright$  Have reduced 4,251 Ton CO<sup>2</sup>e/year and 12,458 kWh/day in 2021.
  - Ongoing projects will continue and install solar power systems in 2023, which is estimated to reduce 334 Ton CO<sup>2</sup>e/year annually.
  - Strive to reduce the greenhouse emission by 25% from 2020 to 2030.



# Thank You

