

Stock Symbol: 3167

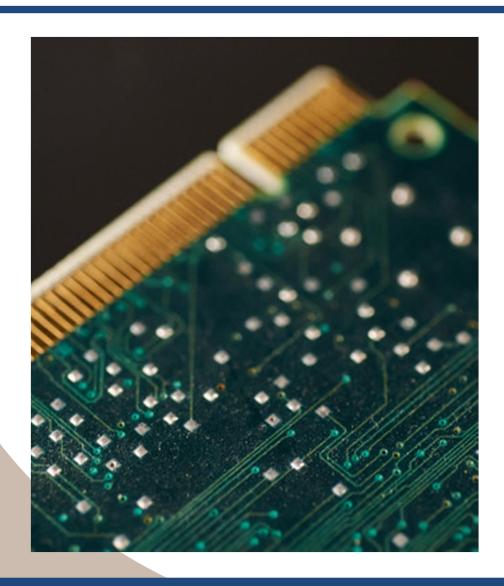




### Disclaimer

- The predictive information mentioned in this presentation, including operational outlook, business situation, etc., is obtained by the Company through internal and external sources.
- The company's actual operational results that may occur in the future due to factors including but not limited to market competition and the conditions of international economy.
- The outlook for the future in this presentation is the Company's external views until now. For these views, if there are updates or adjustments in the future, the Company is not responsible for reminding or updating again at any time.





# Company Profile



### **Business Scope**

- Standard & High end PCB Drilling Machine
- Standard & High end PCB Routing Machine
- Automation
- Others

**PCB Industry** 



- Inspection Machine
  - Vision Series
  - Handler Series
- Metrology
  - CMP Pad metrology

Semi con. Industry



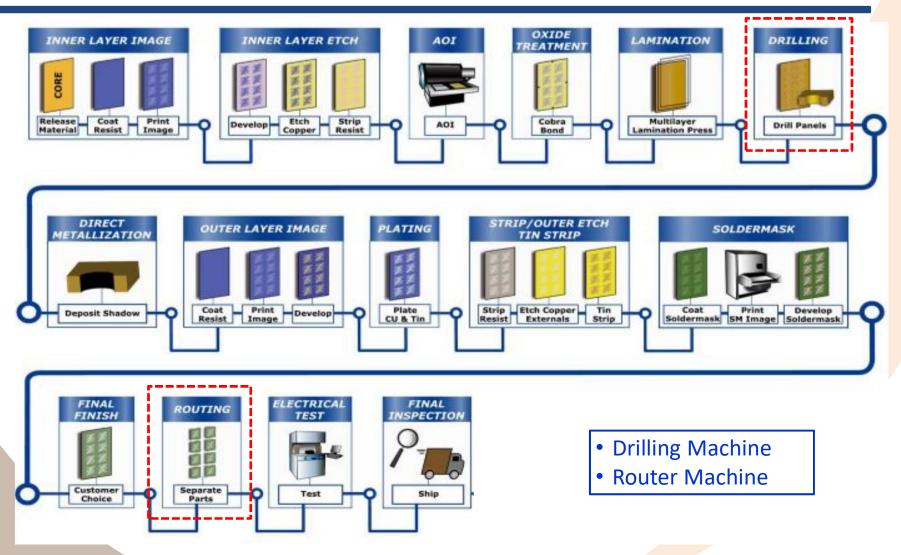
• R&D/purchasing/production/sales/service/management

TL Technology Team



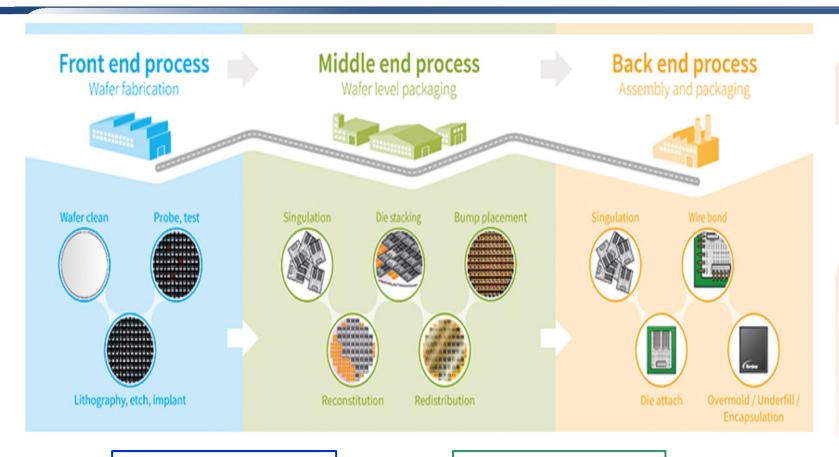


### TL PCB Machines





### TL Semiconductor Machines



CMP Pad Metrology

- Metrology Series
- Vision Series
- Handler Series

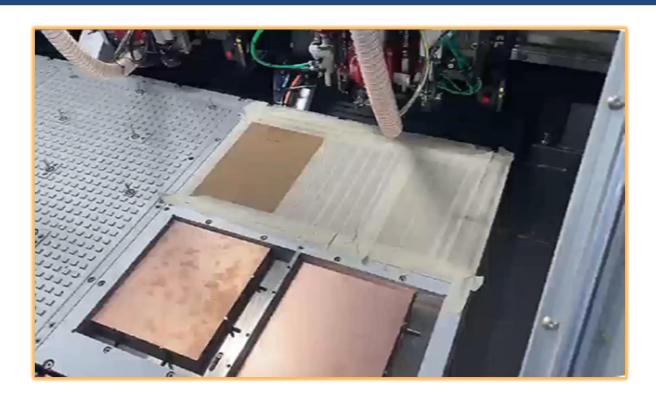


# **Important Events in 2022**

- 1. PCB BU has been developing high-margin machines:
  - 1) High-end automatic router.
  - 2) Measuring the inner copper.
  - 3) ABF process machine.
- 2. Semi BU:
  - 1) Promote CMP Pad Metrology.
  - 2) Upgrade and promote Vision and Handler machines.



### High-end Automatic Router Machine



- > It will be modular designed and can be flexible adjusted.
- > Router efficiency will be doubled.



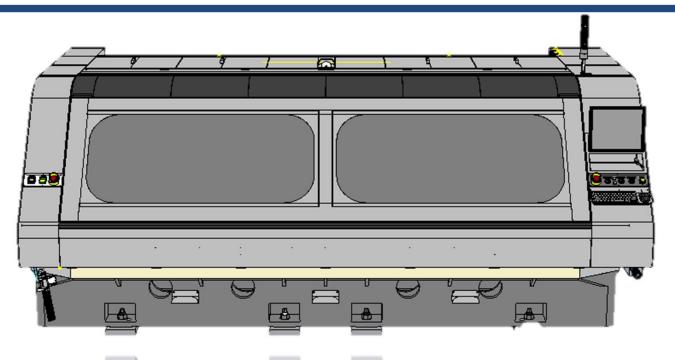
# Measuring inner copper Machine



- It will assist the producing in servo boards, communication boards and automotive boards.
- ➤ It will enhance/upgrade the accuracy of high-end drilling machines.
- ➤ It will further expand the sales revenue and market share in high-end drilling machines.



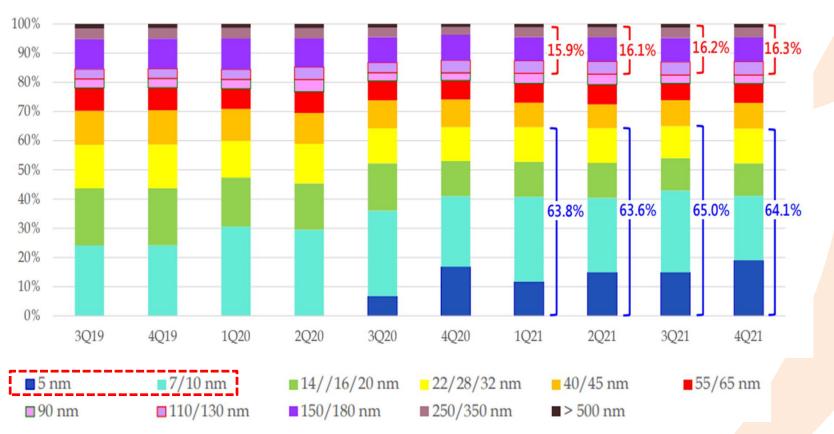
# ABF/BT process Machine



- > High speed drilling.
- > For ABF or BT process.
- For small hole drilling.



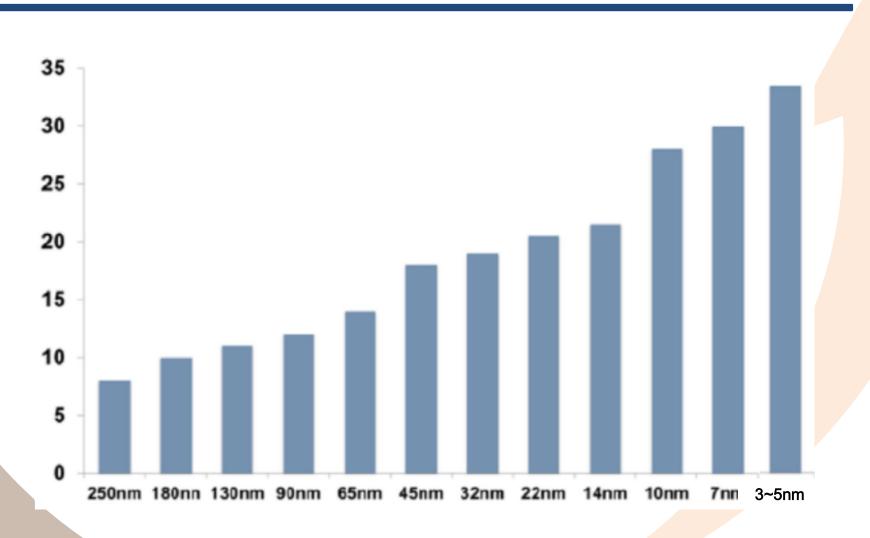
# Advanced process capacity in Semiconductor is growing



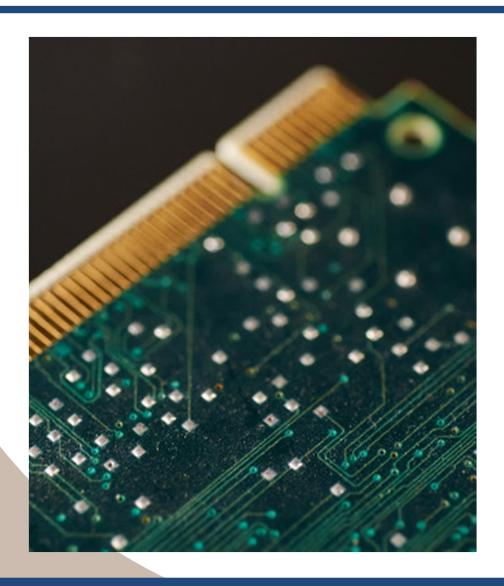
Source: TW MIC 2022.05.



### CMP polishing process is increasing







# Operational Performance



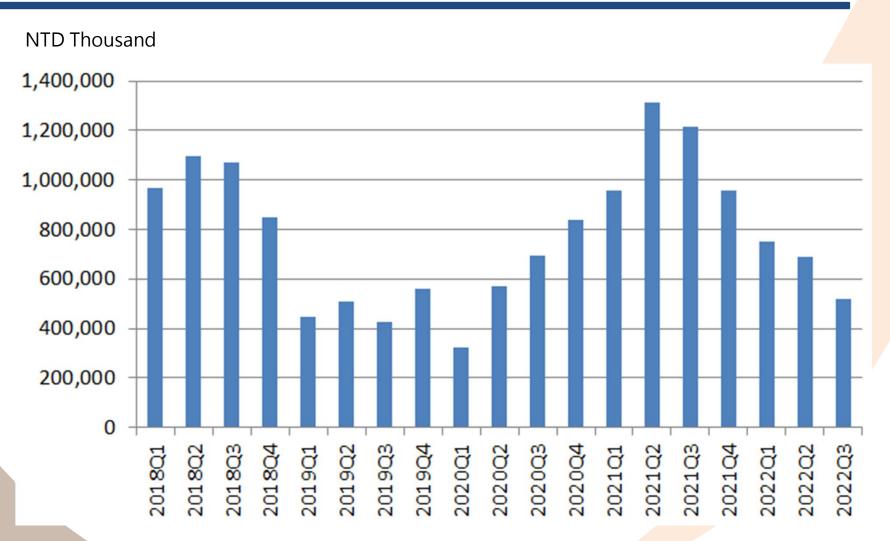
# **Income Statement**

NTD Thousand	2022Q3		2021Q3		2022Q1~2022Q3		2021Q1~2021Q3	
NTD Modsand	Amount	%	Amount	%	Amount	%	Amount	%
OPERATING REVENUE	520,979	100.00	1,214,355	100.00	1,963,045	100.00	3,483,505	100.00
OPERATING COSTS	439,812	84.42	878,379	72.33	1,473,229	75.05	2,587,965	74.29
GROSS PROFIT	81,167	15.58	335,976	27.67	489,816	24.95	895,540	25.71
Selling and marketing expenses	27,477	5.27	48,400	3.99	117,422	5.98	155,109	4.45
General and administrative expenses	31,448	6.04	49,132	4.05	106,856	5.44	130,377	3.74
Research and development expenses	57,393	11.02	78,478	6.46	151,630	7.72	191,735	5.50
OPERATING EXPENSES	109,447	21.01	143,144	11.79	385,575	19.64	432,060	12.40
OPERATING PROFIT	(28,280)	(5.43)	192,832	15.88	104,241	5.31	463,480	13.30
NON-OPERATING INCOME AND EXPENSES	47,486	9.11	8,415	0.69	272,021	13.86	5,163	0.15
PROFIT BEFORE INCOME TAX	19,206	3.69	201,247	16.57	376,262	19.17	468,643	13.45
NET PROFIT FOR THE PERIOD	16,743	3.21	159,131	13.1	323,848	16.5	360,608	10.35
BASIC EARNINGS PER SHARE(NTD)	0.21		1.99		4.06		4.52	

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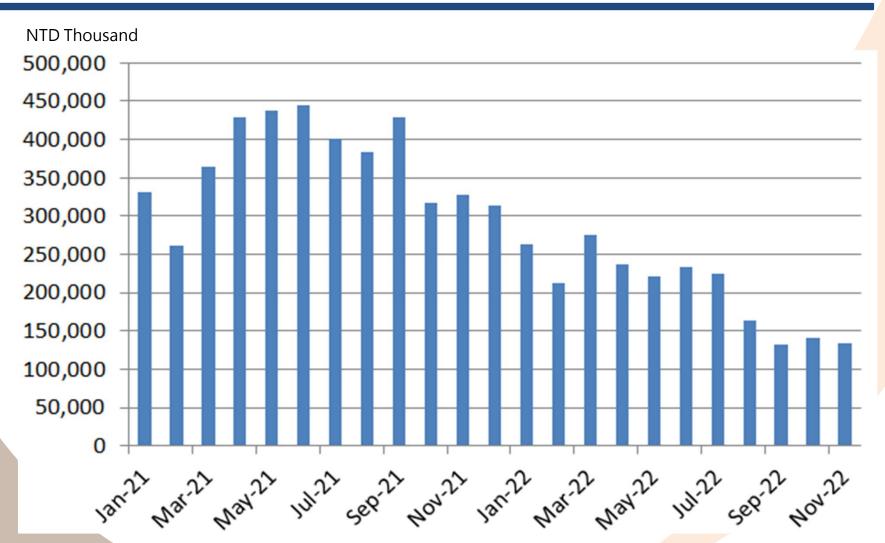


# **Quarterly Revenue**



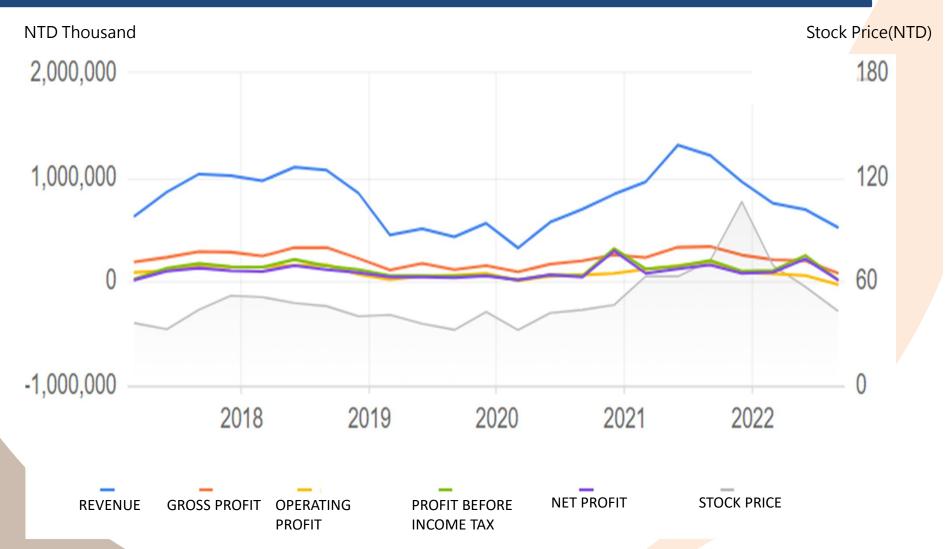


# Monthly Revenue



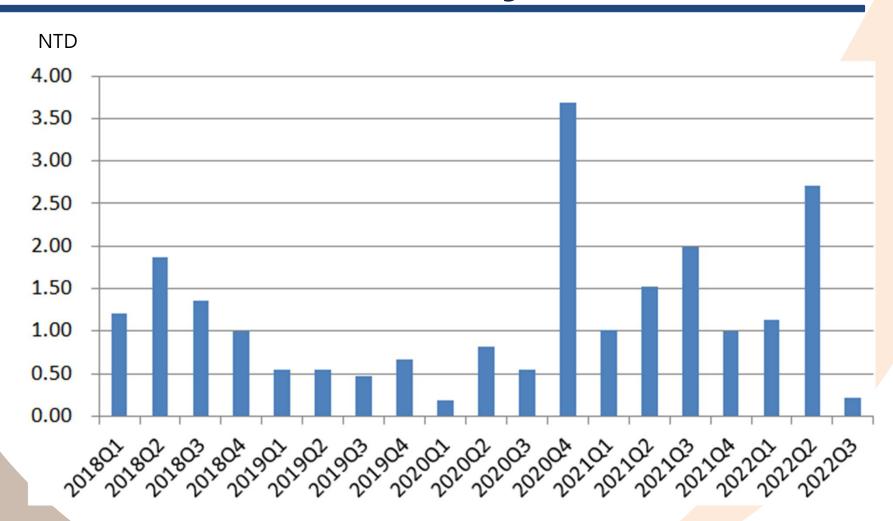


# **Operation Result**

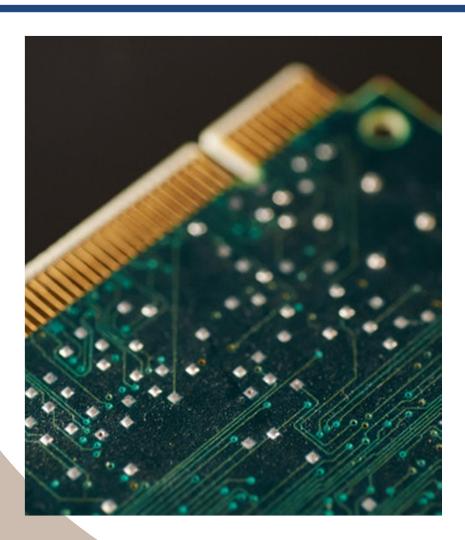




# **Quarterly EPS**







# Appendix



### **Company Overview**

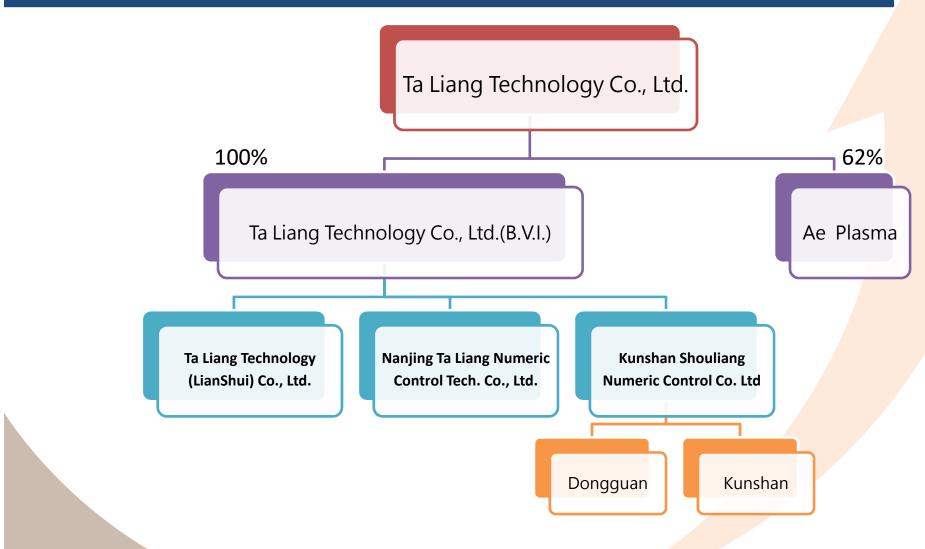
Stock Symbol	3167
Capital	NTD 801,341,160
Chairman	Laurie Wang
General manager	Jerry Chen
Headquarter	No.49, Yulien St. Bader Dis. Tauyoun
Factories	Bade ` Nanjing ` Lianshui





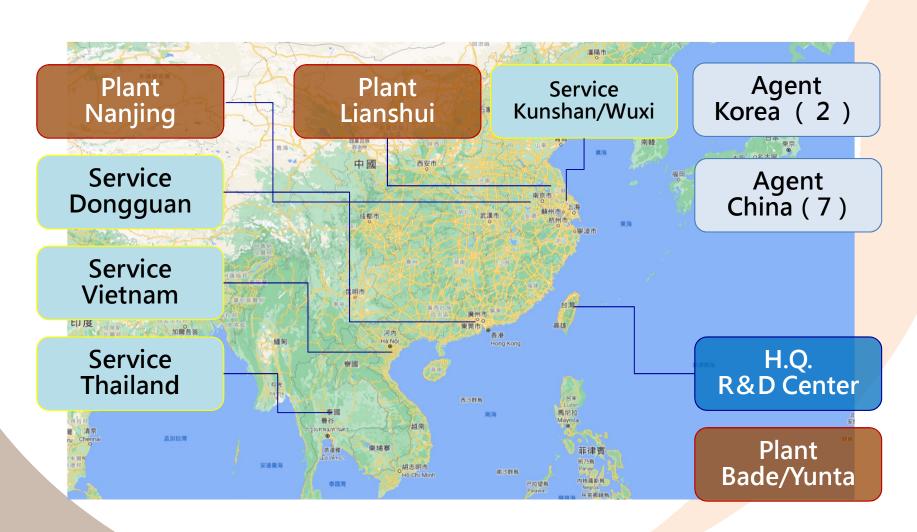


### **Group Organization**





### **Production & Service Base**





### Milestone

#### 1980

Ta Liang Industrial Co., Ltd. was established in Taoyuan, Taiwan.



#### 2000

Company was renamed "Ta Liang Technology Co., Ltd." . **2001** 

Second plant was completed for PCB drilling machine.

#### 2002

Stock pubic offering and PCB routing machine was developed.

#### 2004

Resin panel cutting machine was developed.

#### 2007

Nanjing Taliang Numeric Control Tech. Co., Ltd. was established.

#### 2017

IC Packaging & Testing Machine were developed.

#### 2018

Semiconductor products has entered for mass production stage.

#### 2020

IA equipment was developed. Semiconductor business department was established and producing for key customers.

#### 2021

Taiwan acquired a new factory and integrated.

2020~

1980~

1990~

2000~

#### 2011

New factory location was located in Yangmei, Taoyuan, for expanding Production capability. 2012

TLSK Technology Co., Ltd. was established as joint venture with SAKI, Japan.

#### 2013

Ta Liang Technology Co., Ltd. listed on TSEC. 2015

Taliang Tech. (Lianshui) Co., Ltd. was established.





### **Products in PCB industry**







PCB Routing M/C

Standard type



CCD type

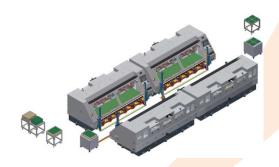


**Depth Control** 





Adapted with 1 Spindle Drilling machine



Adapted with 6 Spindle Drilling machines



### Advantages to meet New requirements

Method	Feasibility	Current Situation		
Enhancing mechanical performance	Not Easy to reach	<ol> <li>The precision requirements for PCB equipment are getting higher and higher.</li> <li>The various functional advantages in the past are now the basic standard equipment in every manufacturer.</li> </ol>		
		1. New PCB designs have characteristics of high-density, multi-layer, high-frequency or high-speed, thus the requirements of accuracy are much higher in position, depth controlling and precision.		
	High Entry Barrier	2. We(Ta Liang) improve the visual measurement, Cloud management and eliminate PCB expansion and contraction by software program (the position of X, Y axis, and the depth of Z axis).		
	3.	3. TL has self-developed controller and abilities to develop the programs to meet customers' demands, unlike other competitors still using outsourcing software and programs.		



### Products in Semi con. industry

Handler Series



IC Chips-Test Handler



**IC AVI Handler** 



IC P&P Test Handler

Vision System Series



Wafer Type



None Wafer Type

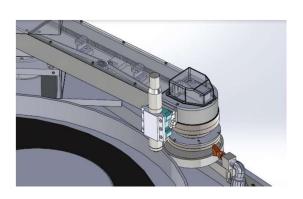
Metrology



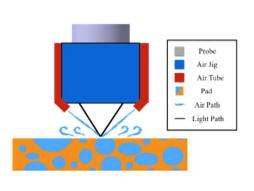
CMP Pad Metrology



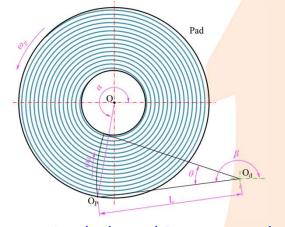
### **CMP PAD Metrology**



**CMP PAD Metrology** 



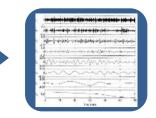
Water Layer Purge



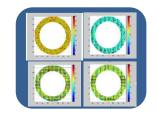
Trajectory Analysis and Reconstruction



**Data Collection** 



In-process Data Monitor



Topography Analysis





### **Metrology Patent**

CMP PAD Patent	Number/Application
Instant finishing method of CMP pad	I695754 (R.O.C.)
CMP pad Metrology method for chemical and mechanical equipment	Applying (R.O.C.)
Method for Repairing Polishing Pad in Real time	Applying (USA)
Detection Method and Detection Apparatus for Polishing Pad of Chemical Mechanical Polishing Device	Applying (USA)
Signal Analysis with AI module	Will Apply (R.O.C., USA)



# CMP Pad Metrology Advantage

Items	Ta Liang	Sensofar	WaferMasters	NOVACAM
Source	Self-developed	Foreign	Foreign	Foreign
Type	In-situ /Standalone	Standalone	Standalone	Standalone
Request	Dynamic	Static	Static	Static
Mode	Extensive	Single Point	Single Point	Single Point
Diagram				

Items	Before	After		
Roughness	Can't be Measured	Real-time Measured Monitoring		
Morphology	Limited sampling Measured	Real-time Large Area Monitoring		
Abrasion	Limited sampling Measured	Real-time Large Area or Zone Monitoring		
Micro Structure height	Limited sampling Measured	Real-time Measured Monitoring		



### Customers(PCB M/C)









崇达 SUNTAK

















孫鼎科技 Zhen Ding Tech.















































競國集團 **APCB GROUP** 



### Customers(Semi con. M/C)



































# Thank You!

Ta Liang Technology Co., Ltd.