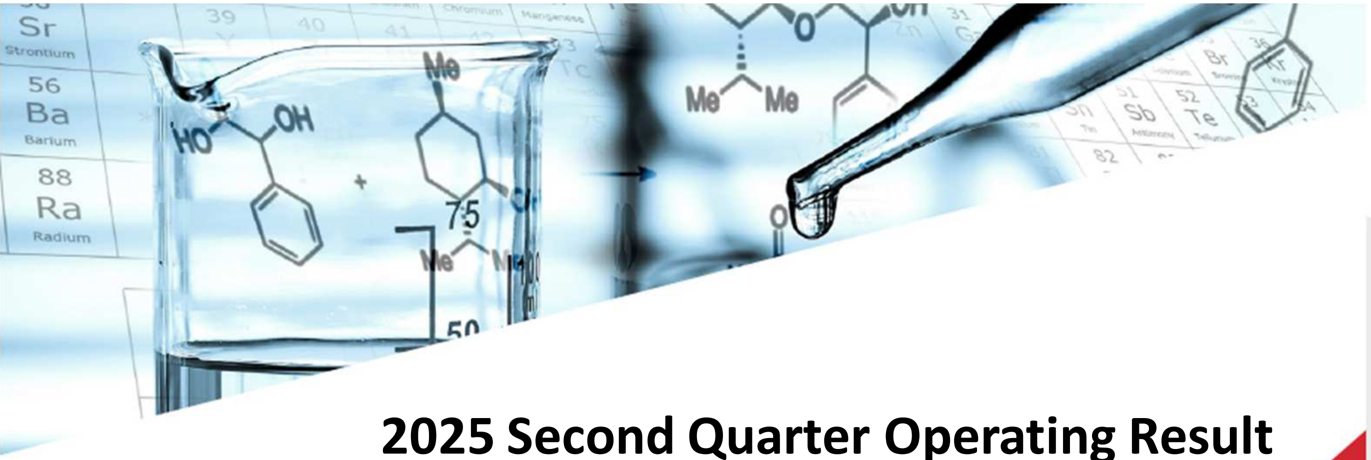
長興材料

ETERNAL MATERIALS

Elements of Infinite Possibilities



2025 Second Quarter Operating Result
&
Photoresist Materials Division：The Layout of Electronic Materials Business Group in North American Market

Presenter : Director, H.T. Shen (Photoresist Materials Division)
B.C.Liu (spokesperson)
Date : 2025/08/15

Agenda

1. **Profile**
2. **2025 Second Quarter Operating Result**
3. **Introduction to Electronic Materials Business Group**
4. **The Layout of Electronic Materials Business Group in North American Market**

Profile

Profile

Chairman — **Allen K. L. Kao**

Core Business — **Manufacturing, processing and sales**

Founding

1964

Employees

4,899

Overall Sales Revenue

USD$ 1,376 million

Production Sites

26

Taiwan	5
China	15
USA	1
Thailand	1
Japan	2
Malaysia	1
Italy	1

Headcounts of Researcher

597

R&D expenditures

For sales revenue

4%

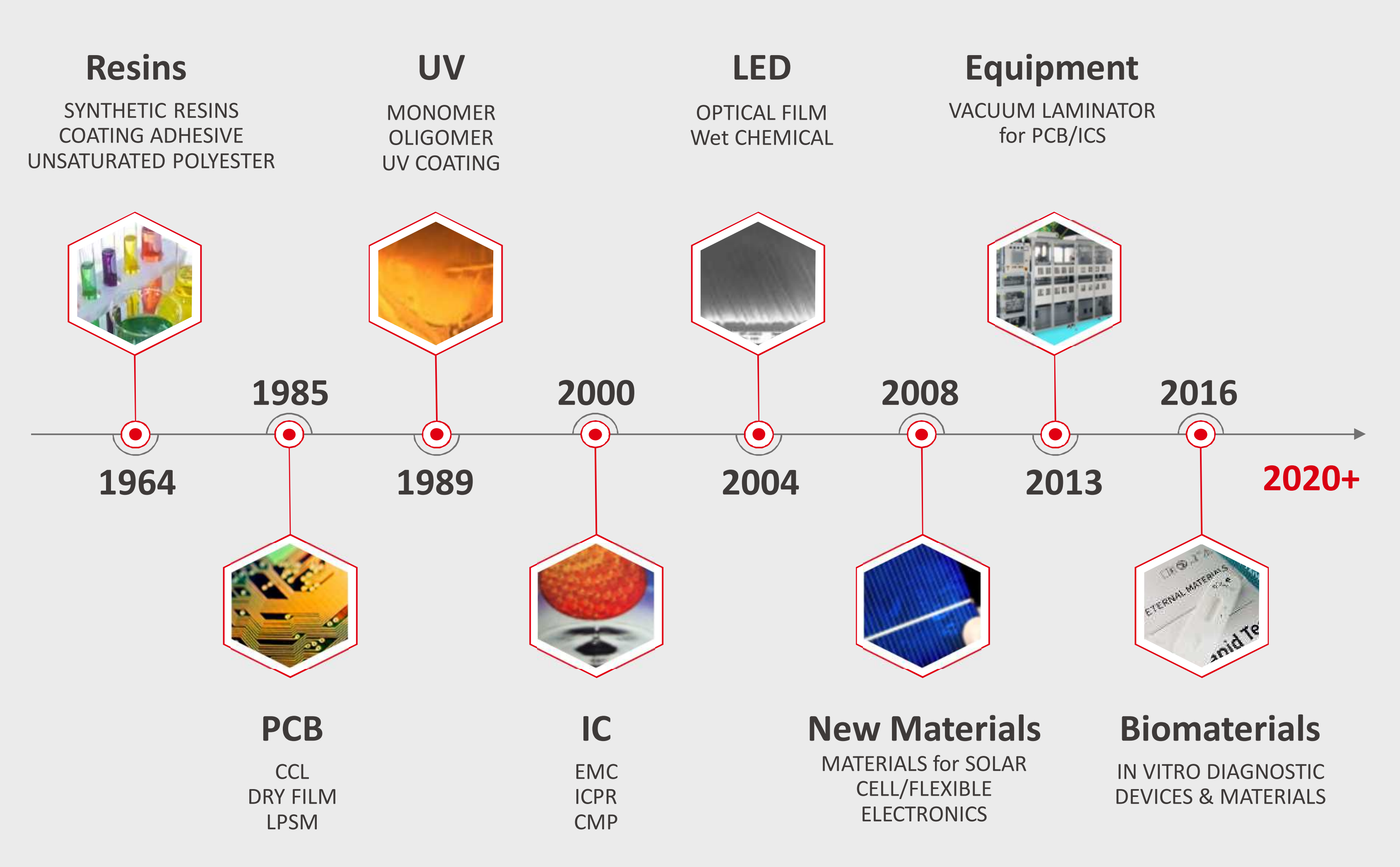
Notes 1 :

Number of Employees on June 30,2025

Notes 2:

refer to year 2024 Consolidated statement

Development Milestones



1964

Resins

SYNTHETIC RESINS
COATING ADHESIVE
UNSATURATED POLYESTER

1985

PCB

CCL
DRY FILM
LPSM

1989

UV

MONOMER
OLIGOMER
UV COATING

2000

IC

EMC
ICPR
CMP

2004

LED

OPTICAL FILM
Wet CHEMICAL

2008

New Materials

MATERIALS for SOLAR
CELL/FLEXIBLE
ELECTRONICS

2013

Equipment

VACUUM LAMINATOR
for PCB/ICS

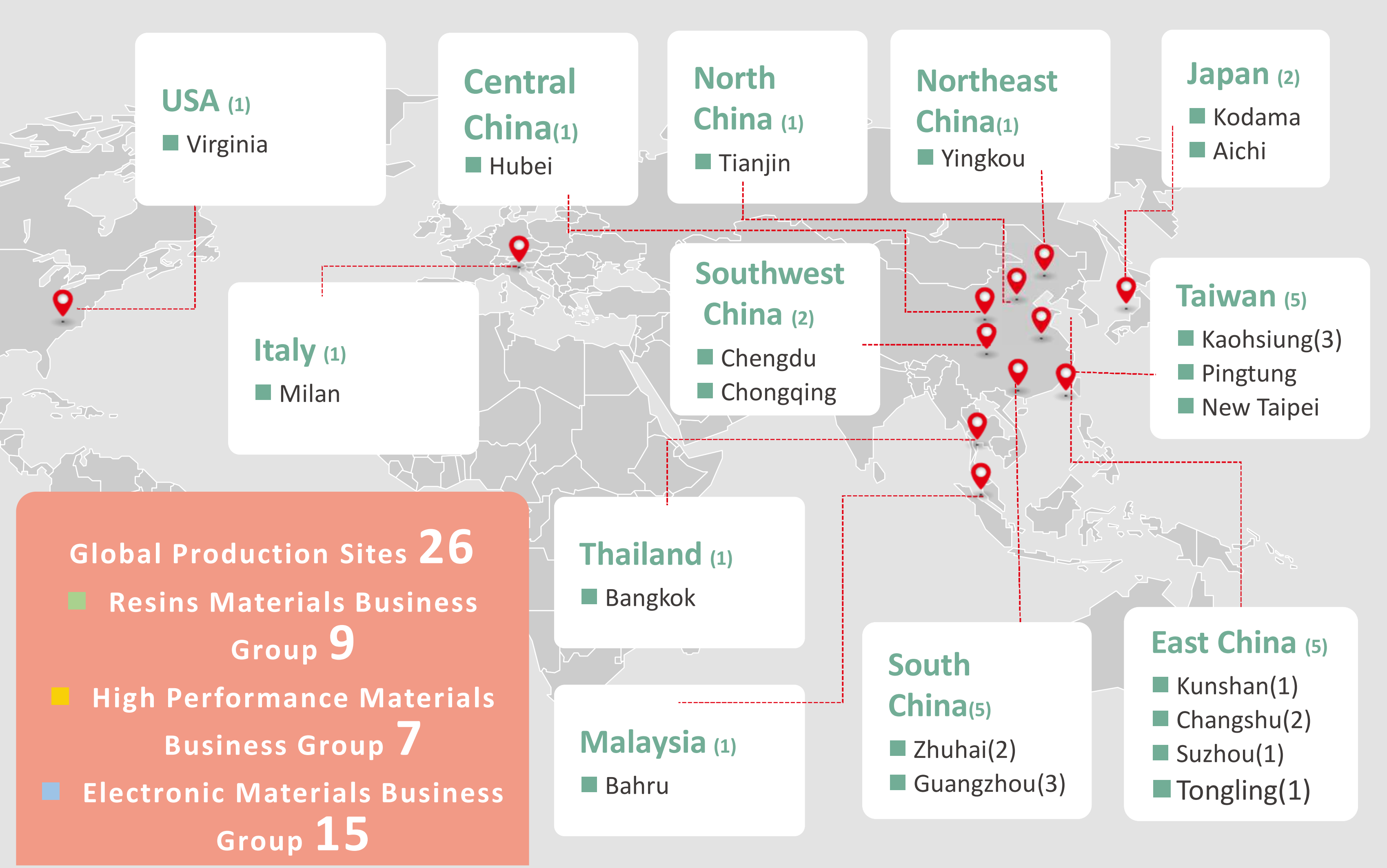
2016

Biomaterials

IN VITRO DIAGNOSTIC
DEVICES & MATERIALS

2020+

Global Production Sites



USA (1)
- Virginia

Central China(1)
- Hubei

North China (1)
- Tianjin

Northeast China(1)
- Yingkou

Japan (2)
- Kodama
- Aichi

Italy (1)
- Milan

Southwest China (2)
- Chengdu
- Chongqing

Taiwan (5)
- Kaohsiung(3)
- Pingtung
- New Taipei

Thailand (1)
- Bangkok

Malaysia (1)
- Bahru

South China(5)
- Zhuhai(2)
- Guangzhou(3)

East China (5)
- Kunshan(1)
- Changshu(2)
- Suzhou(1)
- Tongling(1)

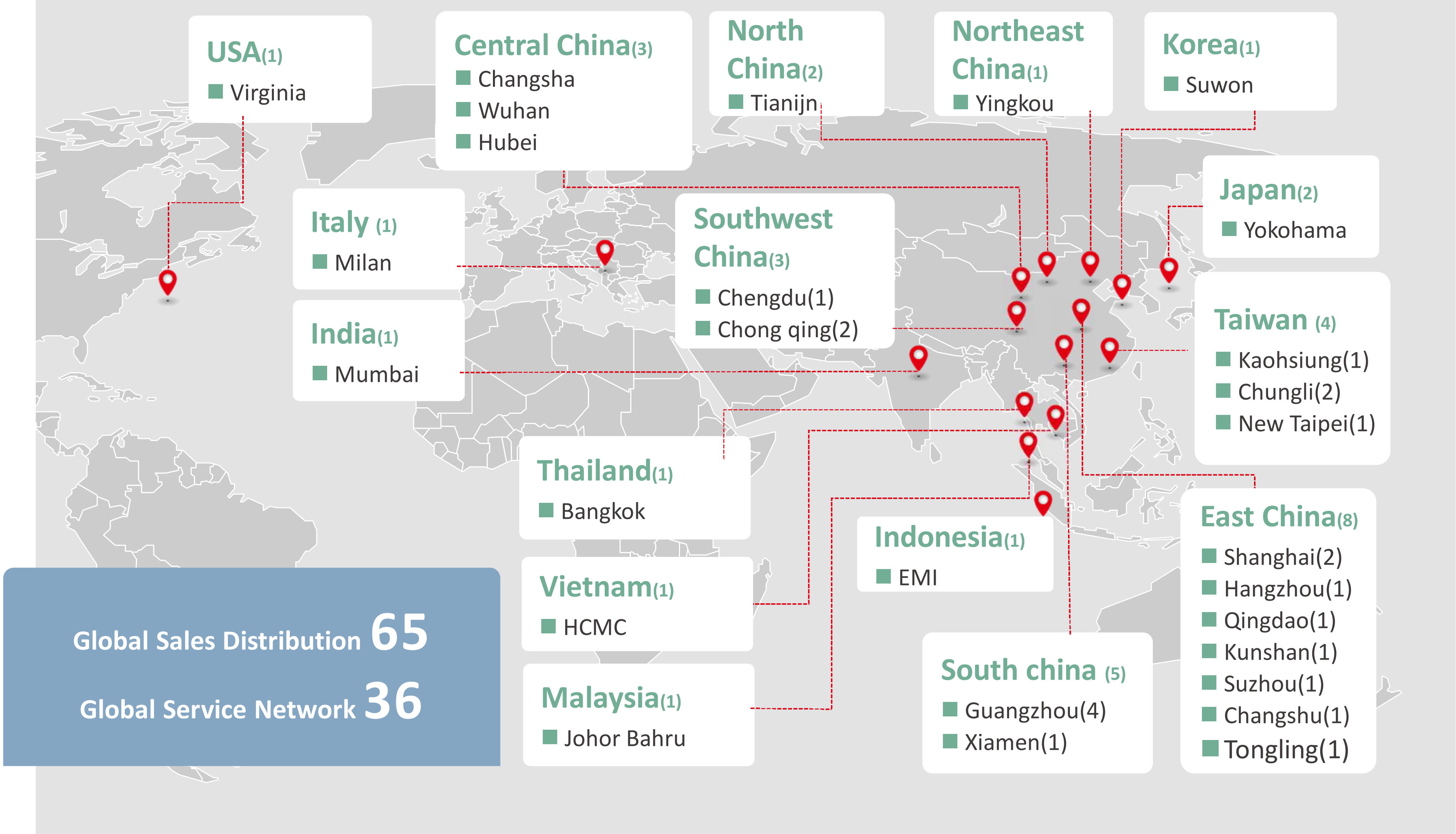
Global Production Sites 26

🟩 **Resins Materials Business Group 9**

🟨 **High Performance Materials Business Group 7**

🟦 **Electronic Materials Business Group 15**

Global Service Network



USA(1)
- Virginia

Central China(3)
- Changsha
- Wuhan
- Hubei

North China(2)
- Tianijn

Northeast China(1)
- Yingkou

Korea(1)
- Suwon

Italy (1)
- Milan

Southwest China(3)
- Chengdu(1)
- Chong qing(2)

Japan(2)
- Yokohama

India(1)
- Mumbai

Taiwan (4)
- Kaohsiung(1)
- Chungli(2)
- New Taipei(1)

Thailand(1)
- Bangkok

Indonesia(1)
- EMI

East China(8)
- Shanghai(2)
- Hangzhou(1)
- Qingdao(1)
- Kunshan(1)
- Suzhou(1)
- Changshu(1)
- Tongling(1)

Vietnam(1)
- HCMC

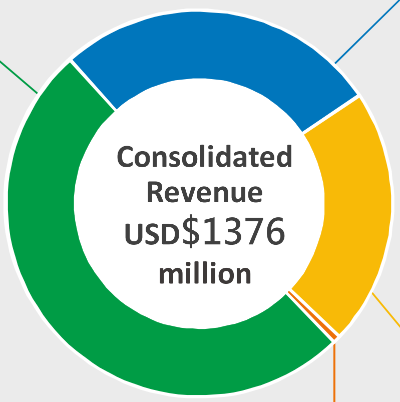
Malaysia(1)
- Johor Bahru

South china (5)
- Guangzhou(4)
- Xiamen(1)

Global Sales Distribution 65

Global Service Network 36

2024 Product Lines Sales Ratio



Resins Materials 47.71%

- Alkyd Resin、Solvent-Based Acrylic Coating Resin
- Water-Based Acrylic Coating Resin
- Acrylic Resin For Adhesives and Overprinting
- Polyester Polyol Resin、Fluorocarbon Resin
- Polyurethane Resin、Saturated Polyester Resin
- Amino Resin、Optoelectronic Materials、 Wind power materials
- Other Coatings Resin
- Conductive polymer
- Unsaturated Polyester Resin
- Vinyl Ester Resin、Fire Retardant Resin
- Epoxy System、Structural Adhesive
- Polyester for Polyurethane Foam

Electronic Materials 25.53%

- Dry Film Photoresist
- Dry Film Solder Mask
- UV INK
- Dry Film Photosensitive Polyimide
- Liquid Polyimide Material
- Vacuum Laminator
- Toll Coating Service
- Paper Phenolic Copper Clad Laminate
- Composite Epoxy Copper Clad Laminate

High Performance Materials 26.31%

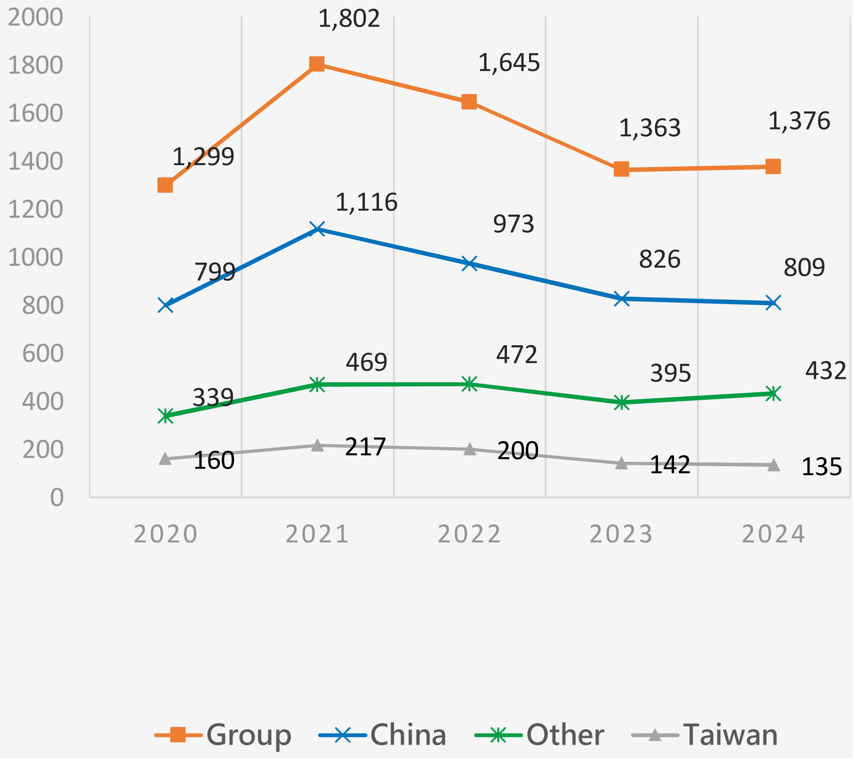
- UV Monomers
- UV Oligomers
- Special Coatings
- Pressure Sensitive Adhesive / Adhesives
- Silicone Materials
- UV Curable Molding Material

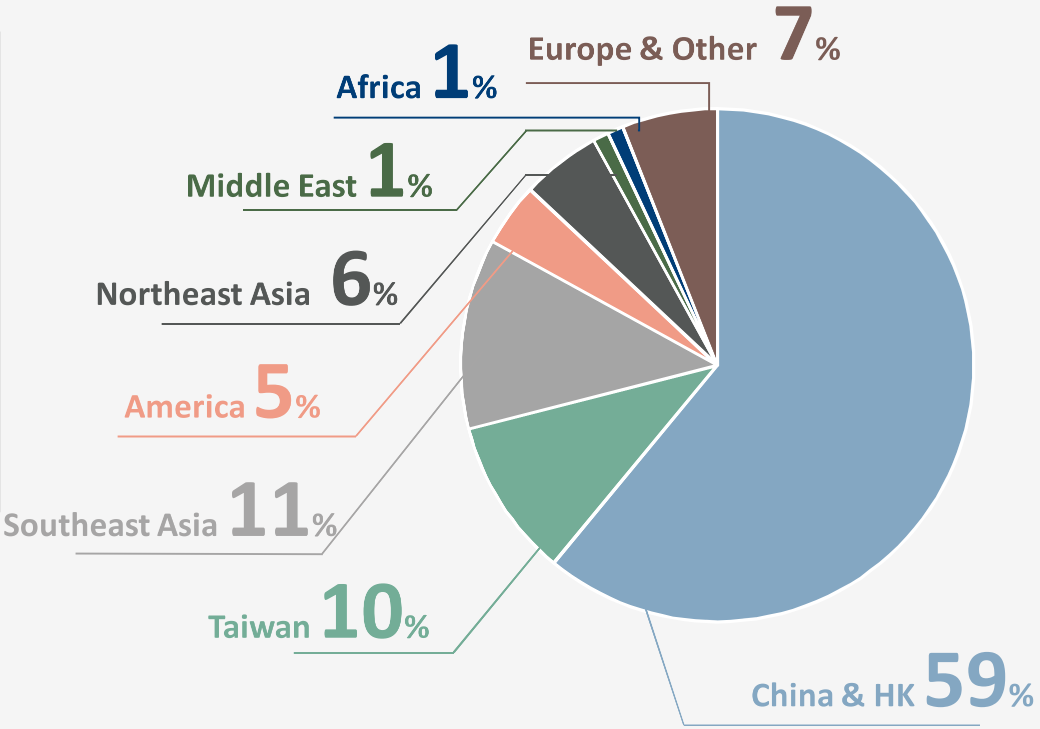
Others 0.45%

- Enzyme
- antibody for IVD
- Liquid molding compound
- Thermoplastic composite materials
- Hydrophilic film for strip
- Si/C for LIB materials
- Blood glucose test strip material
- High Frequency Materials in 5G

Annual Sales Distribution (In the recent 5 years), 2024 Regional Markets Sales Ratio

■ **Unit : USD million**





2025 Second Quarter Operating Result

Financial Information-Balance Sheets & Key Indices

Unit：TWD Millions

	2025Q2		2024		2023	
	Amount	%	Amount	%	Amount	%
Cash and cash equivalents and current financial assets	7,050	12	8,370	13	7,624	13
Accounts receivable	13,516	24	15,447	25	15,213	26
Inventories	8,074	14	8,533	14	8,479	14
Financial assets	3,462	6	3,797	6	3,516	6
Property, plant and equipment	20,009	35	20,836	33	18,323	31
Total Assets	57,055	100	62,419	100	58,538	100
Short-term borrowings	5,755	10	5,698	9	5,557	9
Current portion of long-term borrowings	1,901	3	2,605	4	3,741	6
Long-term borrowings	13,285	23	12,257	20	11,858	20
Total Liabilities	32,131	56	33,429	54	33,322	57
Total Equity	24,925	44	28,991	46	25,216	43

Key Financial Ratios			
Average cash collection days	131	129	141
Average days required for sale	95	89	99
Current ratio (%)	186	186	182

Financial Information-Statements of Comprehensive Income

Unit：TWD Millions

	2025Q2		2024		2023	
	Amount	%	Amount	%	Amount	%
Operating Revenue	20,465	100	44,191	100	42,452	100
Gross profit	4,222	21	8,824	20	8,147	19
Operating expenses	(3,244)	(16)	(6,655)	(15)	(6,232)	(15)
Operating Income	978	5	2,170	5	1,915	5
Non-operating income and expenses	65	0.3	574	1	268	1
Net profit attributable to owners of the company	702		1,835		1,504	

Key Financial Ratios			
Net profit margin (%)	4	4	4
EPS	0.6	1.56	1.28
ROE (%)	5	7	6

Financial Information-Cash Flow Statements

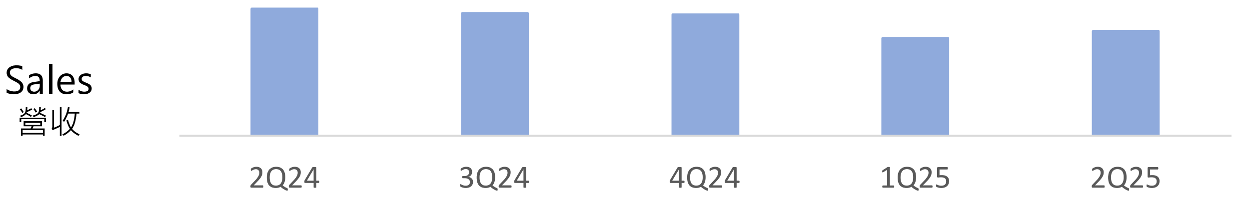
Unit：TWD Millions

	2025Q2 Amount	2024 Amount	2023 Amount
Cash and cash equivalents at the beginning of the year	7,103	6,382	5,451
Cash flows from operating activities	1,908	4,612	6,514
Acquisition of property, plant and equipment	(1,708)	(3,587)	(3,149)
Increase (decrease) in borrowings	965	2,101	(1,107)
Dividends paid	(1,414)	(943)	(1,414)
Other items	(457)	(1,678)	250
Effects of exchange rate changes on cash and cash equivalents	(530)	214	(163)
Cash and cash equivalents at the end of the period	5,867	7,103	6,382
Free cash flow	200	1,025	3,365

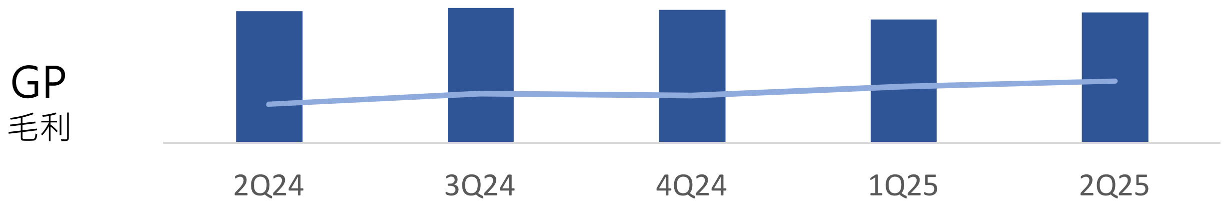
Note: Free cash flow=
Cash flows from operating activities - Acquisition of property, plant and equipment

Sales Revenues & Gross Profits

Unit：TWD Millions



	2Q24	3Q24	4Q24	1Q25	2Q25
▨ **Sales**	11,570	11,334	11,267	10,061	10,405

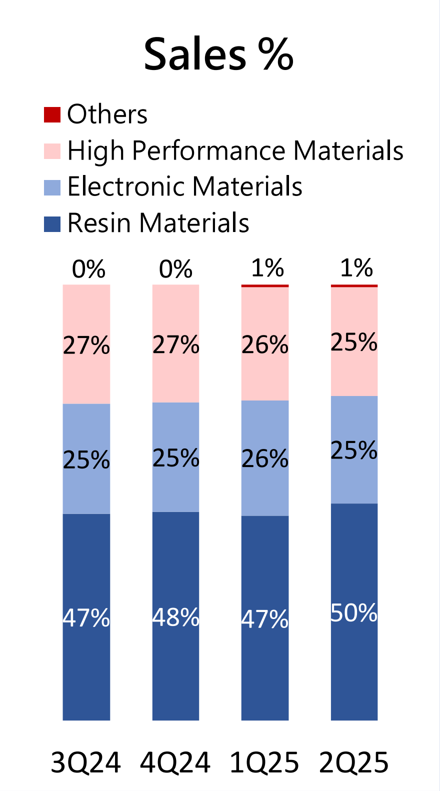


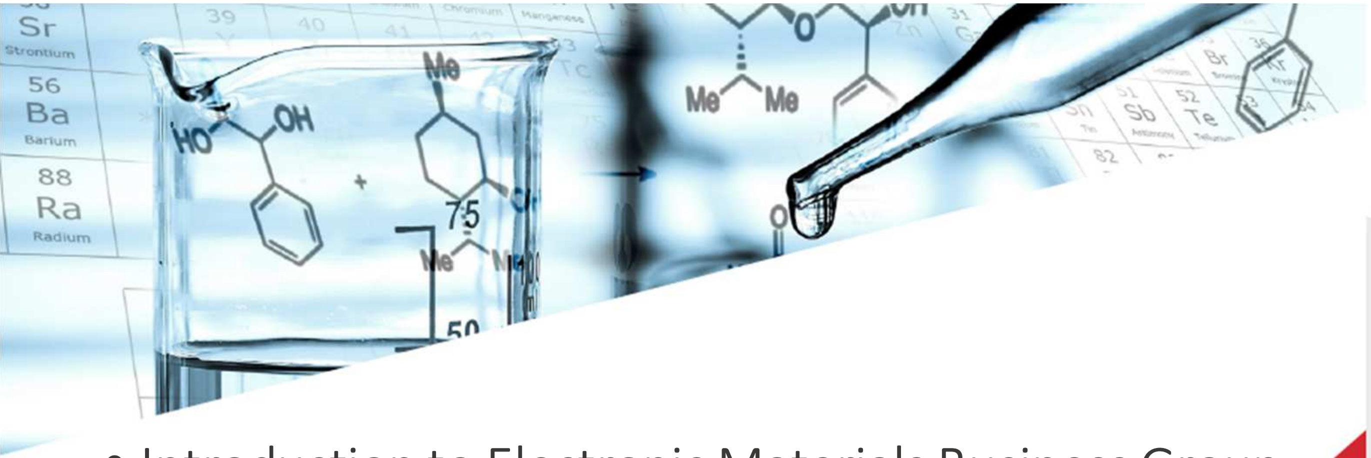
	2Q24	3Q24	4Q24	1Q25	2Q25
■ **GP**	2,198	2,246	2,216	2,054	2,168
— **GPM**	19.0%	19.8%	19.7%	20.4%	20.8%

2Q25	**y/y**	**q/q**
Sales	-10.1%	+3.4%
Gross Profits	-1.4%	+5.6%

Performance by Segment

TWD Millions	2Q Sales			2Q Operating Profits		
		y/y	q/q		y/y	q/q
Resin Materials	5,191	-7%	+10%	207	+9%	+5%
Electronic Materials	2,569	-14%	-3%	284	+15%	+75%
High Performance Materials	2,585	-12%	-1%	262	-20%	-2%





- Introduction to Electronic Materials Business Group
- The Layout of Electronic Materials Business Group in North American Market

Presenter : Director, H.T. Shen (Photoresist Materials Division)

Date : 2025/08/15

Introduction to Electronic Materials Business Group

1. Electronic Materials Business Group Profile
2. Important Milestones in Business Development
3. Revenue (2020~2025H1)
4. Key Products and Applications

Electronic Materials Business Group Profile

One of the world's leading suppliers of dry film photoresist products

The world's largest supplier of vacuum laminators for ICS

Established in 1988 (DF Task Force)

Consolidated revenue

USD$ 352 million

FY2024

Employees of Electronic Materials Business Group

1,288

Note1

Production Sites

13

Taiwan	2
China	6
USA	1
Thailand	1
Japan	2
Italy	1

Key products and business

- Photoresist Materials
- Vacuum Laminator
- Laminate Materials
- Precision coating

Quality & EHS Verification

- ISO 9001 Quality management systems
- ISO 50001 Energy Management Systems
- ISO 14046 Water Footprint Certification
- ISO 14064 Greenhouse Gases Emissions Verification
- BS 8001 Circular Economy Verification
- ISO 45001 OH&SMS
- ISO 14001 EMS

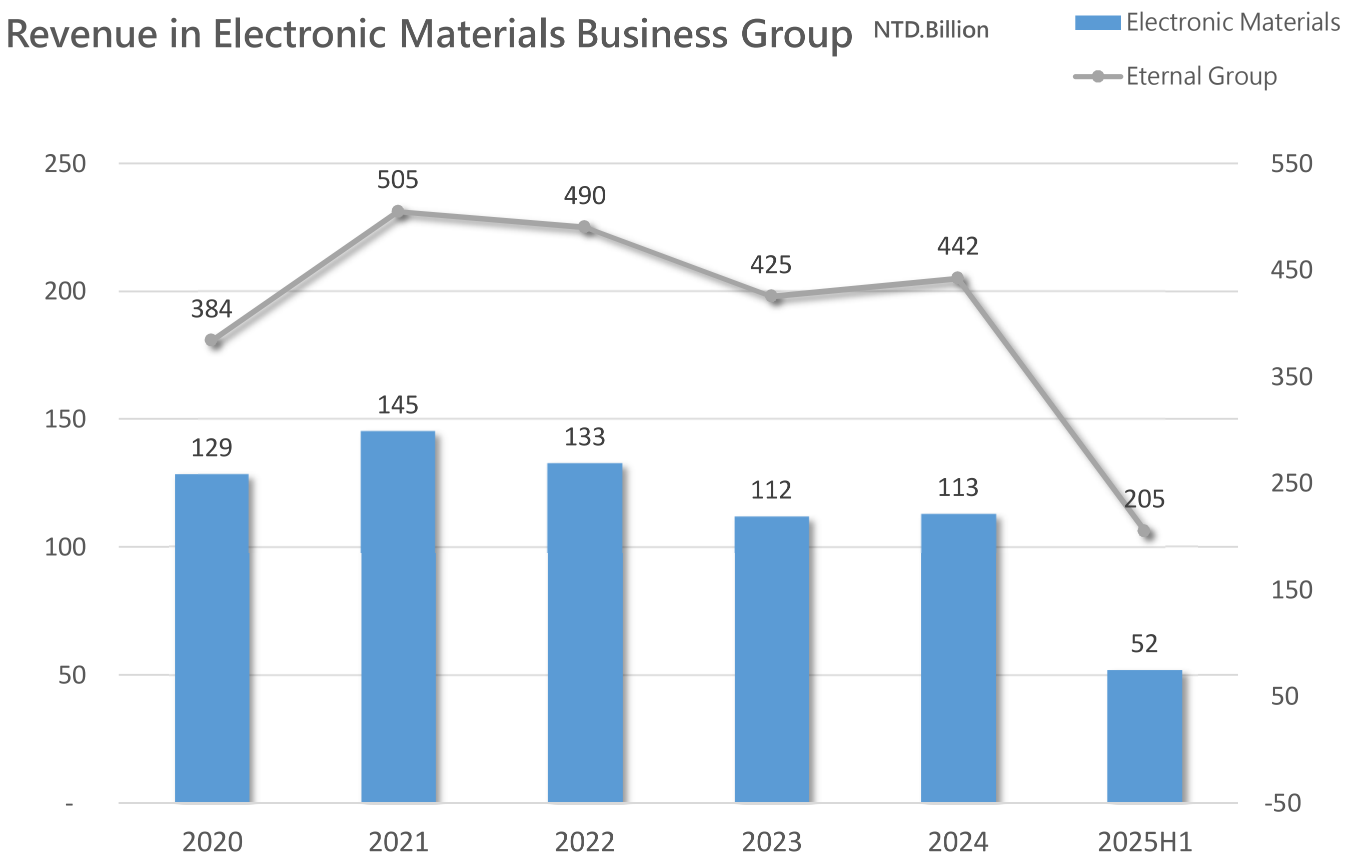
Note1：Source of number of employees: statistics at the end of 2024

Important Milestones in Business Development

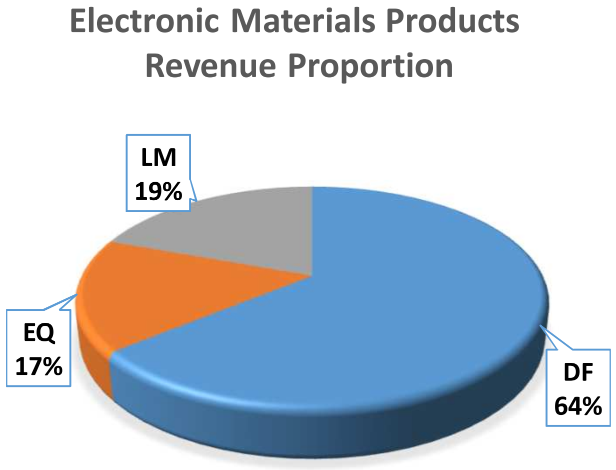
1990	1990 Taiwan Ta-Fa Plant was established and started producing dry film photoresist
1995	1995 Established Eternal Chemical (China) Co., Ltd. Guangzhou (Southern China Slitting Plant)
1999	1999 Established Eternal Technology Corporation (ETC) and Eternal Photo Electronic Materials (Kunshan) Co., Ltd. (Eastern China Slitting Plant)
2001	2001 Established Eternal Photo Electronic Materials (Guangzhou) Co., Ltd. (Southern China Plant 1)
2003	2003 US ETC acquires Shipley Company, L.L.C. Dry Film product line
2006	2006 Established Eternal Photo Electronic Materials (Guangzhou) Co., Ltd. (Southern China Plant 2)
2007	2007 Established Eternal Photoelectric Material Industry (Yingkou) Co., Ltd.
2008	2008 Established Eternal Electronic Material (Thailand) Co., Ltd.
2012	2012 Established Eternal Photo Electronic Materials (Guangzhou) Co., Ltd. Chongqing Branch
2013	2013 Acquired 100% equity of Nichigo-Morton Co., Ltd. (NM Nikko Materials) & acquired 60% equity of Elga Europe S.r.l.
2013	2013 Established Eternal Electronic (Suzhou) Co., Ltd. (Eastern China Plant 1)
2017	2017 Acquired the vacuum laminating machine production business of Nikko Materials OEM
2017	2017 Acquisition of 35% stake in Elga Europe S.r.l.
2022	2022 Established Eternal Precision Machinery Co., Ltd.
2023	2023 Established Hubei Slitting Plant
2023	2023 Established Eternal Precision Machinery (Guangzhou) Co., Ltd.
2025	2025/06 The board of directors has approved the expansion of a new coating production line in Malaysia.

To be continued...

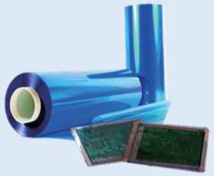
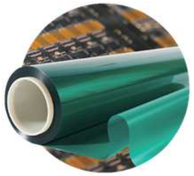
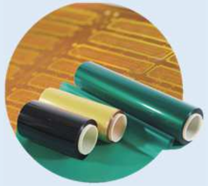
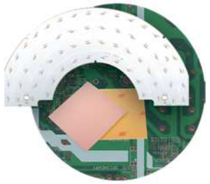
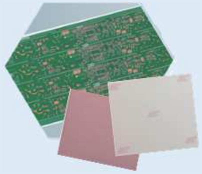
Consolidated Revenue in Electronic Materials Business Group (2020~2025H1)



Source：Annual Report of Eternal Materials



Key Products and Applications

Key Product	Illustrate	Applications
Dry Film Photoresist 	Dry film photoresist is the key component used in the image transfer process. It is widely used in precision etching and electroplating products such as Printed Circuit Board (including Rigid board, Flexible board, Rigid/Flexible composite board, and HDI), Lead Frame, IC Substrates, IC packaging, etc.	IT, communications, automobiles, semiconductors, consumer electronics and other products
Dry Film Solder Mask (DFSM) 	It is mainly used for circuit protection (Solder Mask) of precision outer layers of flexible/rigid PCB, IC Substrate, high-precision metal substrates/ceramic substrates/glass substrates, etc. It is a permanent material.	IT, communications, automobiles, semiconductors, consumer electronics and other products
Photo-Imageable-Coverlay (PIC) 	Low-temperature 150℃ baking type, high-precision weak alkaline dry film photoresist, used for high-precision flexible printed circuit board (FPC)/metal substrate outer circuit protection	IT, communications, automobiles, semiconductors, consumer electronics and other products
Paper Phenolic Copper Clad Laminate (FR-1) 	Copper clad paper phenolic laminate is made of bleached kraft paper impregnated with phenolic resin and then hot press with copper foil to form an insulating material.It is suitable for punching and drilling process.	Home appliances, information peripherals, communications, power supplies and other related electronic products
Composite Epoxy Copper Clad Laminate (CEM-1) 	It is composed of two base materials: fiberglass fabric and bleached kraft paper core material. The product is mainly a single-sided copper foil substrate and is suitable for punching and drilling process.	Home appliances, information peripherals, communications, power supplies and other related electronic products

Key Products and Applications

Key Product		Illustrate	Applications
Liquid UV Curable Marking Ink		The screen printing process is used for text and graphic markings on double-sided and multi-layer printed circuit boards. It is suitable for printing text and graphic markings on double-sided and multi-layer printed circuit boards. The ink has excellent adhesion and heat resistance after hardening.	IT, communications, automobiles, semiconductors, consumer electronics and other products
Liquid Polyimide Material		Touch sensor substrate and flexible electronic substrate, dielectric layer material of probe card	Displays and touch panels, Wafer Test Probe Card
Toll Coating Service		With continuous cumulate of coating technique and experience, which allowed us to cooperate with the customers by providing high value coating products, as well as precision toll coating services.	LCD/TP Industry, PV Backsheet, IC Sub Build-up Film…etc.
Vacuum Laminator		Diaphragm-type vacuum laminator provides excellent conformation of various build-up materials to fine patterns and via holes. In addition, the high-precision hot press unit provides uniform thickness and surface flatness.	The related application processes of IC packaging substrates, FPC, NCF and LED.

The Layout of Electronic Materials Business Group in North American Market

1. Geopolitical Risks
2. North American PCB Industry Development Trends
3. Key Products of the North American PCB Industry
4. Global Layout of Electronic Materials Business group
5. Layout of Electronic Materials Business Group in North American Market
6. Conclusion

Geopolitical Risks

- US tariffs and global conflicts are driving significant raw material price fluctuations, which is accelerating corporate supply chain restructuring.
- Driven by the US-China conflict, the highly concentrated global PCB production in China has shifted to a "China+N" layout. Manufacturers are diversifying production across multiple regions to mitigate risk and enhance operational management.

- The US is the main market for high-end PCBs for servers, automotive, aerospace, and military applications. Companies are building industrial clusters closer to this end market to strengthen supply chain resilience.
- Successful supply chain restructuring requires more than just moving production; it demands comprehensive improvements in local technical support and delivery flexibility.

- Global geopolitical conflicts continue to escalate, prompting many countries to strengthen their defense budgets and expand production capacity. The US military industry is a clear beneficiary, driving the growth of military demand.

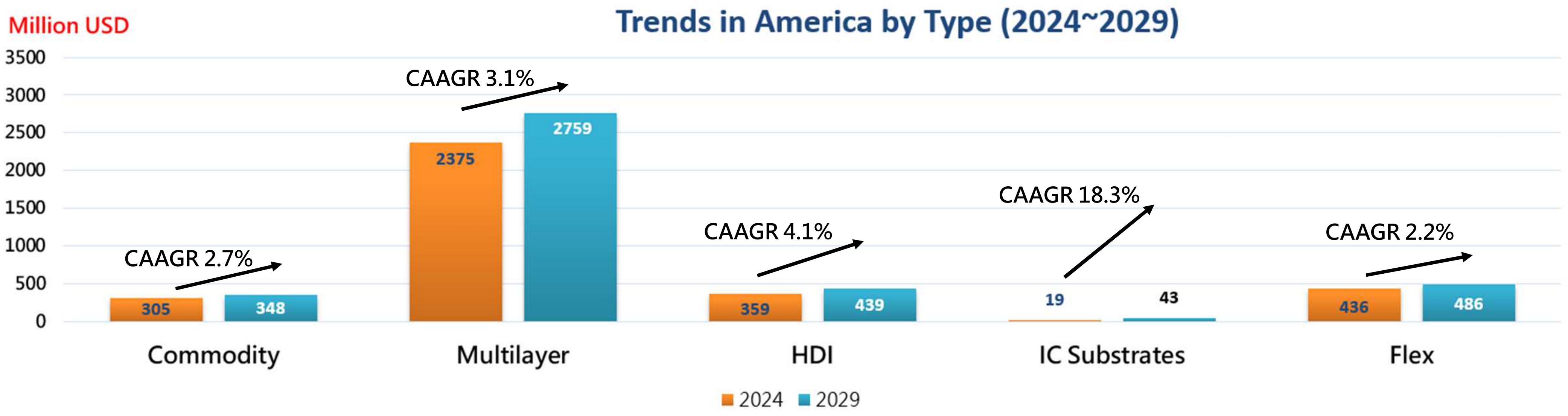
North American PCB Industry Development Trends

- According to PRISMARK Estimates, North American PCB Industry Trend (By Type):

  CAAGR Growth Forecast：IC Substrates >> HDI > Multilayer > Commodity > Flex

  Production Value Estimate： Multilayer > HDI > Commodity > Flex > IC Substrates

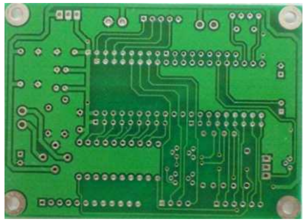
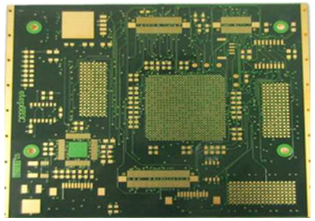
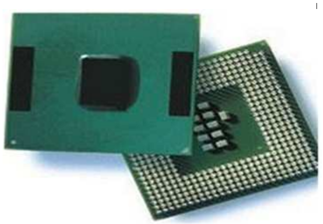
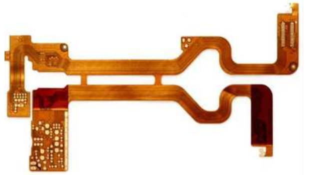
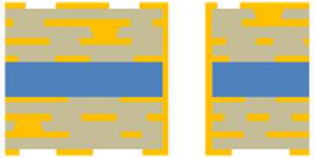
North American PCB Industry Trends (By Type)



Source: PRISMARK & Eternal Materials Data Consolidation

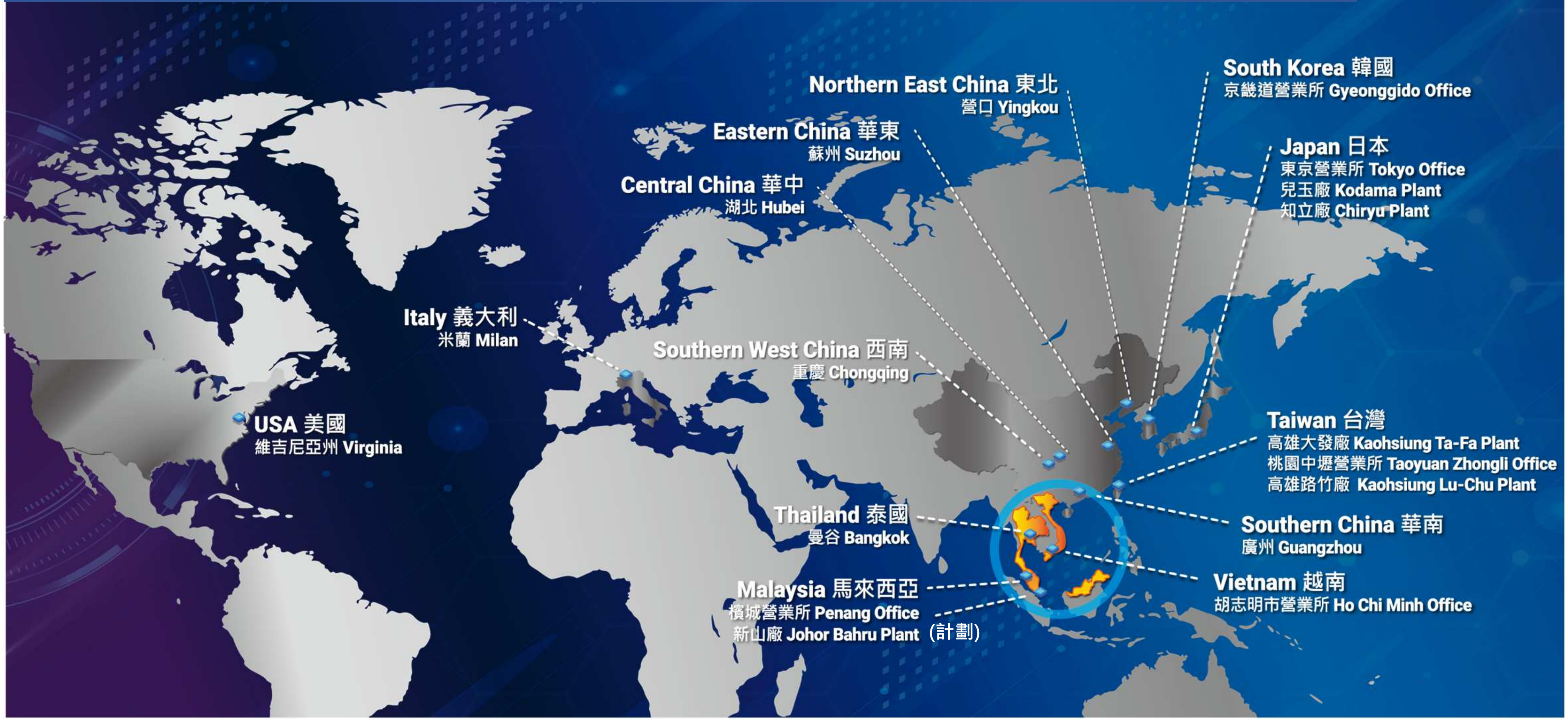
Key Products of the North American PCB Industry

The North American PCB industry is entering a high-growth phase, primarily benefiting from high-performance computing demands from AI servers, smartphones, electric vehicles, and high-speed communication infrastructure. This is driving the rapid expansion of high-value PCB product lines, such as high-density multi-layer boards, flexible printed circuits (FPC), IC substrates, and high-density interconnect (HDI) boards.

ITEM	SS/DS	ML	HDI	IC Substrate	FPC
Product					
Structure					
Application	**Consumer, LED, Power-Supply System**	**PC, NB, Server, EV, Automotive, Industrial PC, Work Station**	**Smart phone, PC, NB, HPC, MotherBoard, EV, Automotive**	**Smart Phone, Module, NB, CPU, GPU, Base Station, Automotive EV, AI**	**EV, Automotive, LED Lamp, Antenna, SIM Card, Mobile Device, Camera Module, Antenna Module**
CAAGR 2024 ~ 2029Y	**2.7%**	**3.1%**	**4.1%**	**18.3%**	**2.2%**

Global Layout of Electronic Materials Business Group

— Implementing a production and customer service layout close to industrial clusters —



Layout of Electronic Materials Business Group in North American Market

— Deeply cultivate the North America —

Local supply chain and application technology team
Provide flexible and immediate sales services for customer

- 📍 Production Site
- ✩ Distributor Location
- ✹ Technical Service Center

Electronic Materials Business Group will be continuously developing dry film photoresist (Dry Film) for PCB industry process to meet customer-end requirement such as high-density multi-layer board HDI, IC carrier board and other corresponding products.

Conclusion

1. US reciprocal tariffs have increased global political risk, leading to a significant rise in the trend of companies investing in the United States.

2. We are targeting high-growth markets and high-end PCBs to drive future revenue. This strategy, combined with continuous R&D, ensures our leading technology and market adaptability.

3. We provide flexible and timely services, supported by a professional engineering team. Our US subsidiary ETC is equipped with coating, slitting capacity and warehouse to meet the demands of the Americas market.

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ETERNAL MATERIALS

Elements of Infinite Possibilities