MATERIAL SCIENCE SERVICE

汎銓科技 半導體產業高階製程領航者

www.msscorps.com

MSSCORPS. (6830)

2025 Q1 Operations & Performance

Form No: Q4-MA01 Ver.1.2

免責聲明 Disclaimer

- This presentation includes forward-looking statements. All statements, other than statements of historical facts, that address activities, events or developments that Material Science Service Corp. expects or anticipates will or may occur in the future (including but not limited to projections, targets, estimates and business plans) are forward-looking statements.
- MSS's actual results or developments may differ materially from those indicated by these forward-looking statements as a result of various factors and uncertainties, including but not limited to market demand, change in legal, financial and regulatory frameworks, government policies, financial market conditions, and other risks and factors beyond our control.
- MSS does not undertake any obligation to publicly update any forward-looking statement to reflect events or circumstances after the date on which any such statement is made or to reflect the occurrence of unanticipated events.

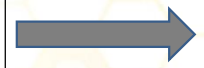
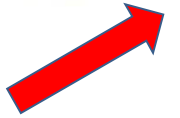
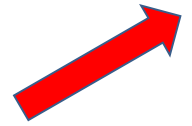
From MSS's Perspective

- With strong A^0 designs, silicon photonics, AI related demand

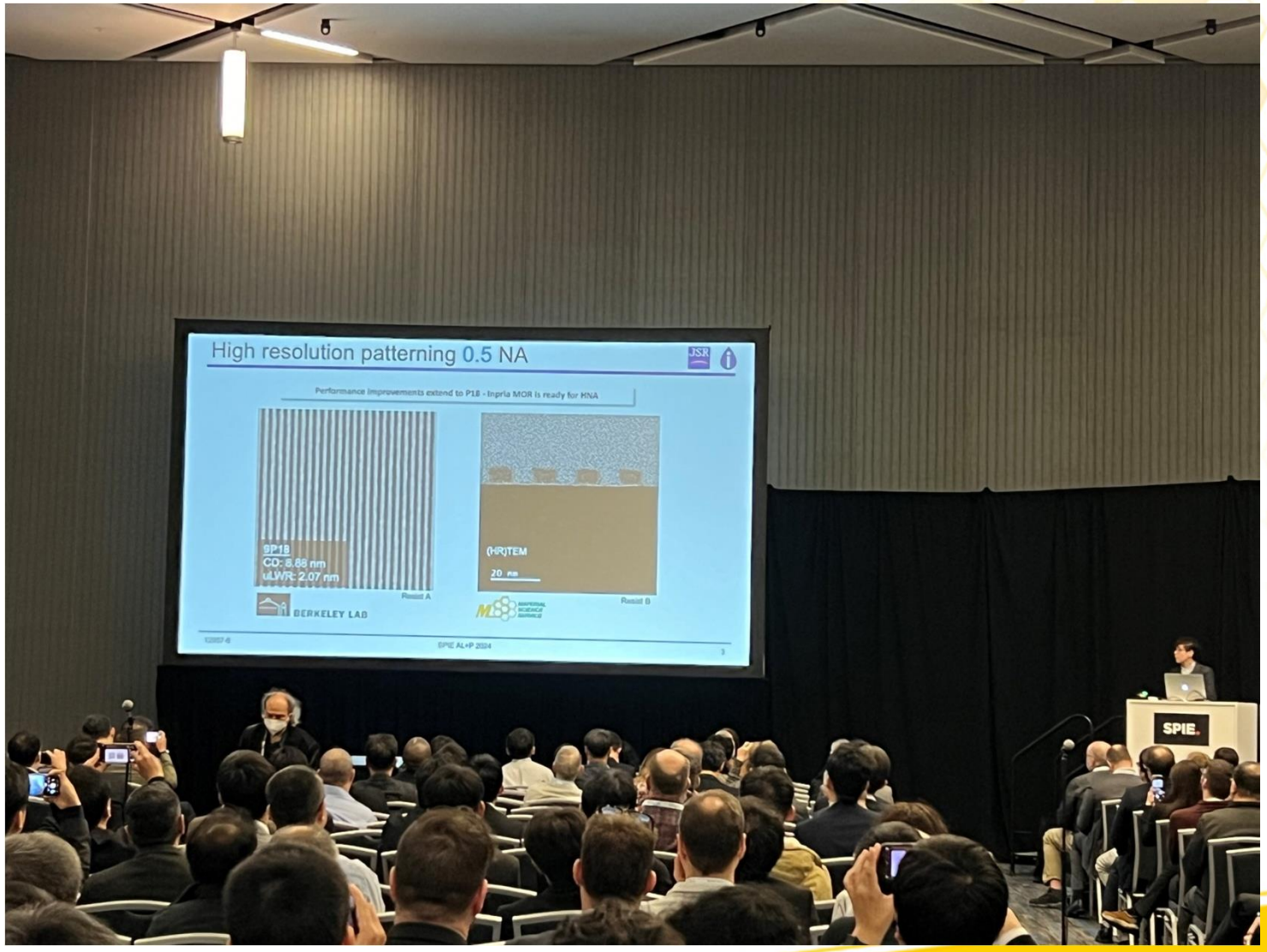
- Customer groups for related applications in Compound 、Wide Band Gap、CIS、H-V、Logic IC and memory facing China Cost Competition, demand "remains" sluggish.

- Global arrangement on 2024,not only no affected by tariff barriers but also benefited from overseas market revenue increased

MSS classification and growth

Item	Group	Technology	MSS niche	Description	2024 Revenue proportion	2025Q1 Revenue proportion	Expected growth in 2025-2026
Advanced processes (Angstrom era)	MA	PR protection technology	3rd generation EUV PR protection technology	Metal oxide PR	54.7%	54.3%	
	MA		Advanced EUV PR protection technology	EUV PR/etch structural analysis			
	MA		Selective deposition sample preparation technology	Special ALD deposition			
	MA	low-k protection technology	BEOL: low-k structure protection technology	AMAT announces black dimand materials			
	MA		BEOL: low-k damage analysis technology	Low-k composition analysis			
	MA		Novel 2D materials analysis method	Weak-bonding materials analysis			
	MA	Ultra-thin sample method	Ultra-thin sample protection method	2nm/A14 device structural analysis			
	MA		FEOL: GAA etch byproduct bonding state analysis	2nm/A14 device composition analysis			
	MA		MEOL: ALE etch byproduct comparison platform				
	MA		High aspect ratio structural TEM analysis technology	DRAM cell analysis			
	MA	Auto-measurement	Artificial intelligence for automatic measurement	Massive/reliable/accurate measurements			
Mature processes	MA	ML ball height/ML defect	Optical component analysis technology: ML ball height/ML defect	CIS	12.7%	9.4%	
	MA		Wearable device AR/VR product lens integration analysis	Meta Lens/Pancake Lens			
	MA	Compound Semiconductor	Epitaxial defect quantitative analysis technology	GaN on Si			
	MA		Carrier concentration distribution analysis in compound semiconductors	GaAs/InP/SiC			
	MA		Integrated stress analysis technology	PA amplification ability (diffraction pattern analysis)			
	MA	OLED	Ultra-low contrast imaging technology for layer structures	Polymer image analysis			
	MA	CCL/FCCL	Soft material slicing technology	Non-curtain effect/void			
	MA		General materials analysis (SEM/FIB CS/Reversed MA/SIMS)				
IC failure analysis	FA	Compound Semiconductor	High voltage and high temperature test (1000V, 300C)	GaN/SiC	9.8%	10.6%	
	FA		Ultrathin sample preparation technology for EFA	GaN/GaAs/SiC/3nm HPC InGaAs electrical measurem			
	FA	Circuit edit technology	Signal lead technology	Tapping wire to directly measure the single logic gate			
	FA		Backside signal lead technology				
	FA		Adding external multiple passive components technology	Advanced process IC			
	FA		Precise local RDL removal technology	Dedicated for WLCSP/FO IC			
	FA		Filpchip front side FIB technology	Flipchip IC			
	FA		General failure analysis (decap/delayer/electrical property/CRD/IC Reverse/SAT/3D Xray)				
Silicon photonics	MA	Silicon photonics structure	Large-area rapid cutting method for silicon photonics/Conductive preparation method for silicon photonics/Low-curtain effect cutting method for silicon photonics	Precise parallel lapping and PFIB to increase TEM capacity for silicon photonics	5.7%	7.0%	
	FA	Silicon photonics photoelectricity test	Light characteristics and attenuation detection for silicon photonics	On the silicon photonics testing platform, the emitted light enters the silicon photonics IC, coupling to the waveguide in the IC, and then passes through different functional components such as light			
	FA		Optical path abnormality positioning, circuit break, light leakage detection for silicon photoni				
	FA		12-inch silicon photonic photometric platform with fully automatic light scanning				
	MA	Advanced package	PFIB/hybrid metal bond/TSV	TEM for 3D IC bond alignment/junction oxide/TSV TEN			
	FA	FA for advanced process chips	3nm delayer/um to nm positioning, direct nano probe measurements on devices	Verified 3nm products			
	FA	Advanced package	Large IC packaging and carrier board separation technology/THZ-TDR open /Thermal xyz fau	Patent protection/5um precise positioning			
Abroad	MA	Special ALD coating/ultra-thin technology	Advanced photoresist protection/low-k structure protection/high depth and width TEM and other technologies		17.1%	18.7%	

- Participate in the development of MOR (Metal oxide) EUV photoresist for next-generation high NA EUV exposure machine



Locations-Taiwan

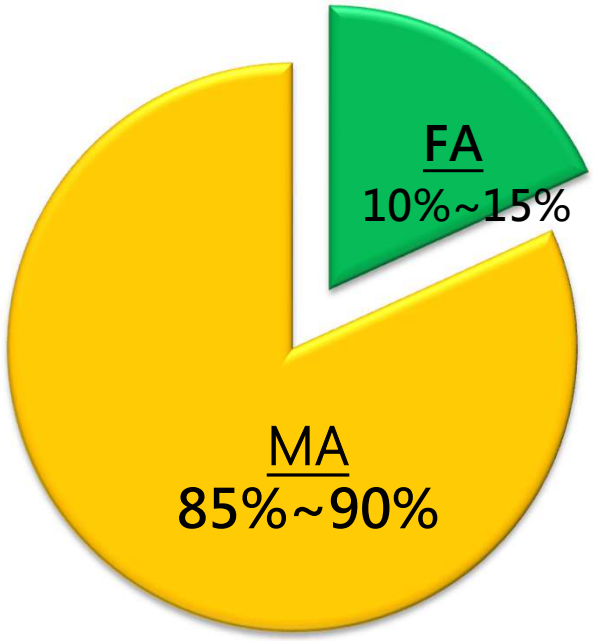
- MA Center + Zhubei Ⅱ：1.4nm-A^0 advanced process
- Headquarter ：「Silicon photonics testing and positioning analysis」
- Zhubei Ⅰ：「AI Customer Area」
- SAC-TEM Center will be opened before 2025/Q3
- Zhubei Ⅲ： We will planned to「AI Customer Area」& 「Silicon photonics testing and positioning analysis」
  in 2026.

Locations-Worldwide

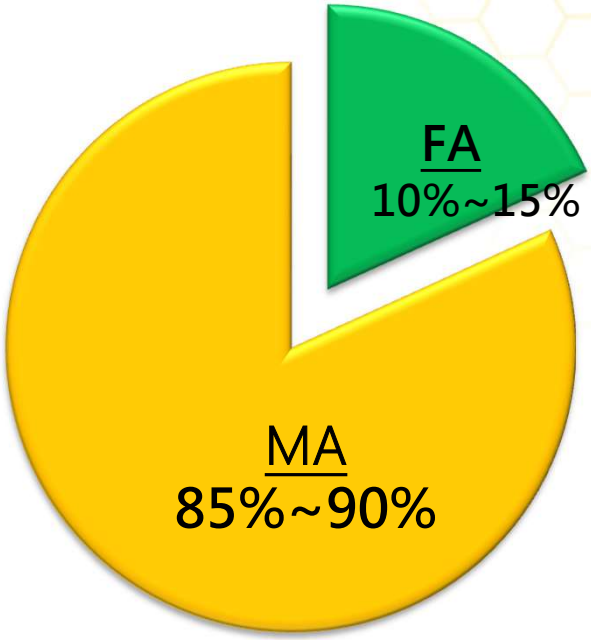
- MSS China：obtained of "High-tech Enterprise" and tax reduction and exemption policies
- MSS USA CORP.：The Lab in completion and the equipments acceptance phase and it will be opened in 2025/05
- MSS Japan：The Lab is still under construction and is expected to open in Q3 2025
- Invited by customer to establish operating base in Europe

Product Portfolio

2024 Q1

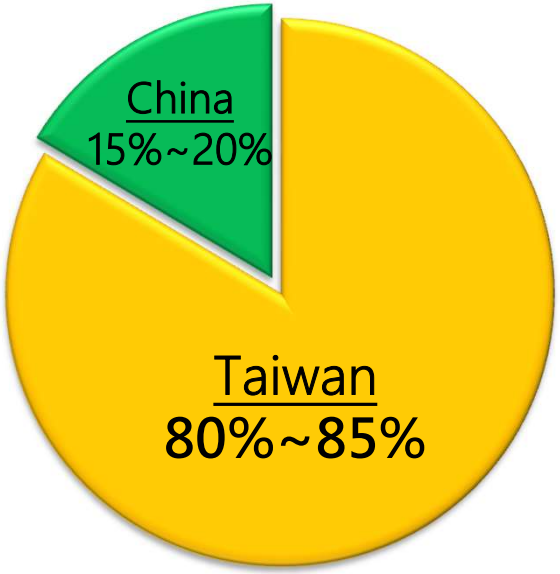


2025 Q1

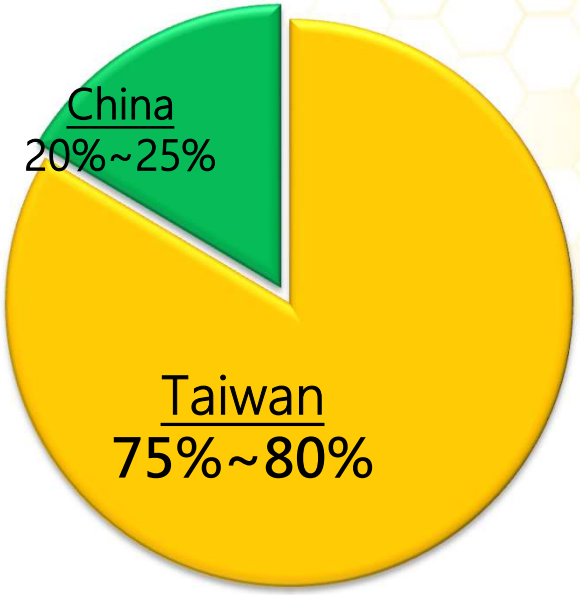


Marketing Mix

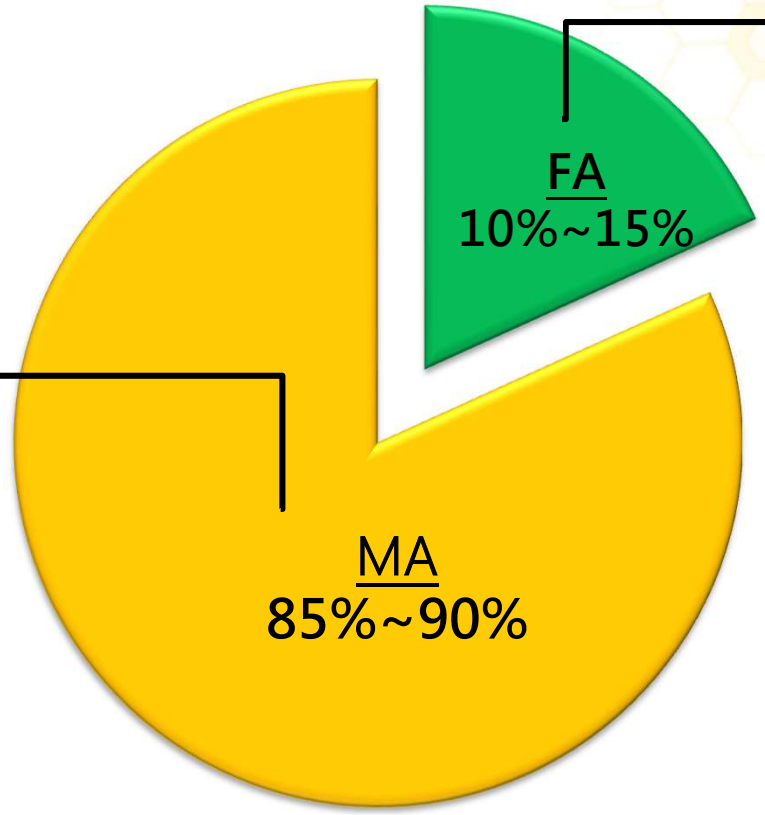
2024 Q1



2025 Q1



2025Q1



Processing time:24hr~7days

Recognition criteria :
Cases entered /closed in the same month

Processing time:12hr~3 days

Recognition criteria :
Cases entered /closed in the same month

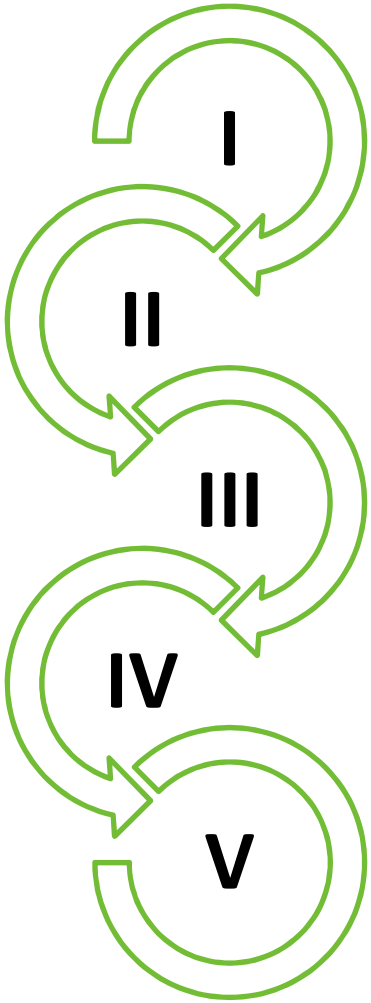
Employees Trends

2024 VS 2025 Q1

Quarter	Q1	Q2	Q3	Q4
2024	605	615	630	650
2025	680	-	-	-

Company Profile

About MSS



汎銓科技股份有限公司
MSSCORPS CO.,LTD.(abbr.MSS)

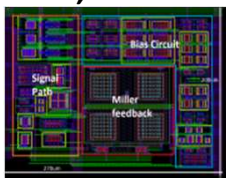
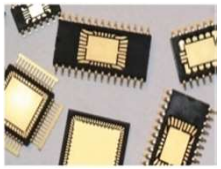
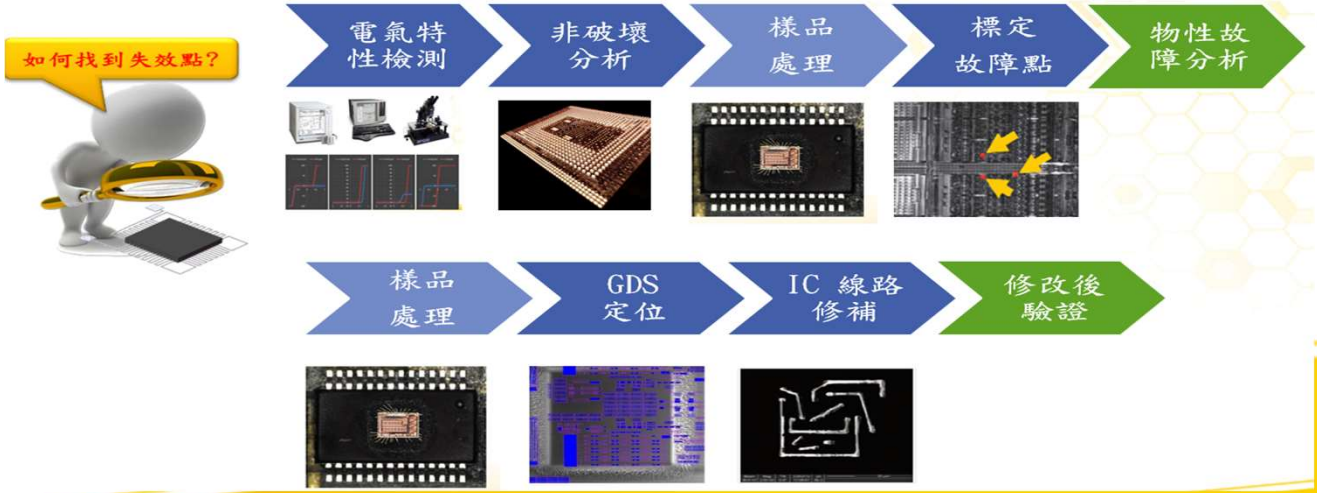
Founded: July 27,2005
Listing: August 31,2022

Chairman and CEO：Gino Liu

Capitalization: NTD518million
Number of Employees: 680

Service Item: MA(Materials Analysis)
FA(Failure Analysis)

MSS role in the semiconductor industry chain-FA

Positioning	Content
FA(Failure Analysis) (Hospital of ICs)	**IC design, mask, and RMA**  Design debugging and failure root cause investigation are the keys to shorten time to market • IC circuit repair for designers to find design bugs and confirm **effectiveness of revised design** • FA method to find failure **root cause** of fail IC after mass production **Package/substrate/PCB/FPC**  MSS **low-damage methods** developed in MA can be extended to be utilized in back-end industry • Material diversity, hardness difference, thinner layers, and weaker inter-layer force to cause difficulties for analysis • Special methods to reduce heat- and electricity-induced **artifacts**
Flow chart	

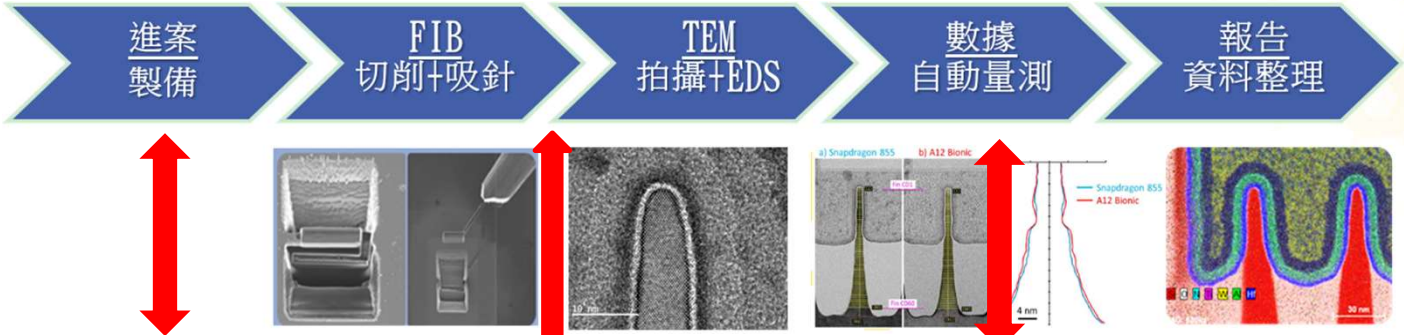
MSS role in the semiconductor industry chain-MA

Positioning	Content
MA(Materials Analysis) (R&D Pilot)	 Wafer foundry/equipment /materials

Providing timely correct structural and chemical analyses of specimen of interest to Fab for

- New technology node R&D, to determine **process parameters**, **new materials**, and **process tools**
- Process tool consistency check during transfer from R&D to mass production
- Yield optimization in mass production

Flow chart



Patent Title	Patent period
低溫原子層鍍膜專利	2020~2039
導電膠保護膜專利	2022~2040
原子層導電膜專利	2022~2041
影像自動量測專利	2022~2040

Statements of Comprehensive Income

(In NT$ thousand)	114年Q1	113年Q1
Revenue	464,693	434,851
Gross profit	**61,123**	**109,406**
Margin %	**13**	**25**
Operating expenses	(109,025)	(91,481)
Total non-operating income and expenses	(3,051)	(7,509)
Profit before income tax	(50,593)	10,416
Income tax expense	2,088	(19,979)
Total non-operating income and expenses	(48,865)	(9,563)
EPS	(0.94)	(0.20)

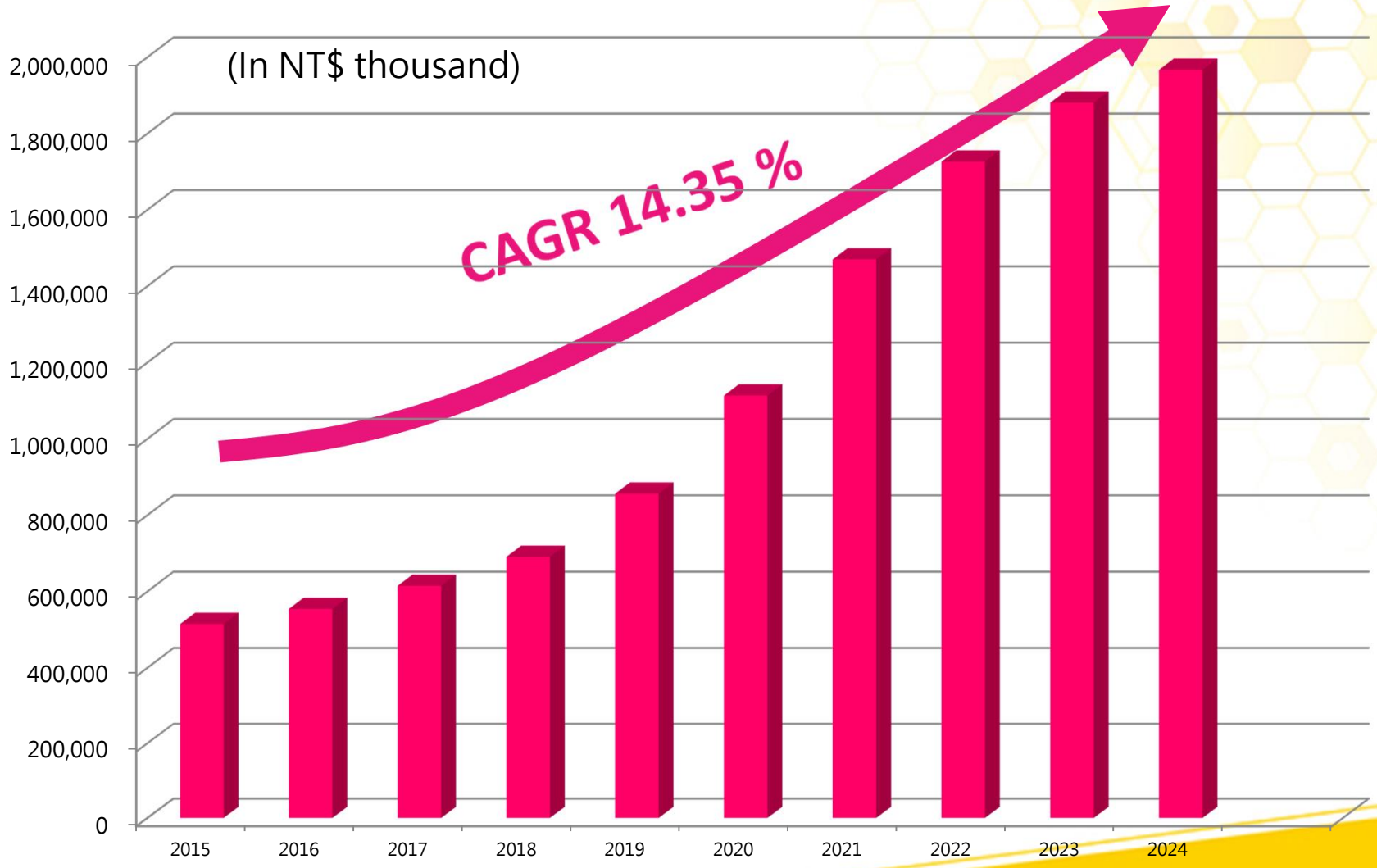
Balance Sheet

(In NT$ thousand)	114/03/31 Amount	%	113/03/31 Amount	%
Cash and cash equivalents	1,131,940	19%	713,736	15%
Trade receivables	666,498	11%	600,275	13%
Prepayments & Other assets	193,048	4%	141,200	3%
Property, plant and equipment	3,274,627	55%	2,410,914	52%
Right-of-use assets and other non-current assets	636,253	11%	791,336	17%
Total Assets	**5,902,366**	**100%**	**4,657,461**	**100%**
Short-term debt & current portion of long- term loans payable	240,667	4%	186,767	4%
Trade payables & Other payables	201,509	4%	393,415	8%
Other current liabilities	146,395	2%	345,302	8%
Convertible Bond	470,860	8%	-	-
Long-term borrowings	1,430,869	24%	1,106,082	24%
Other non-current liabilities	279,497	5%	244,660	5%
Total liabilities	**2,769,797**	**47%**	**2,089,459**	**45%**
Total equity	**3,132,569**	**53%**	**2,568,002**	**55%**

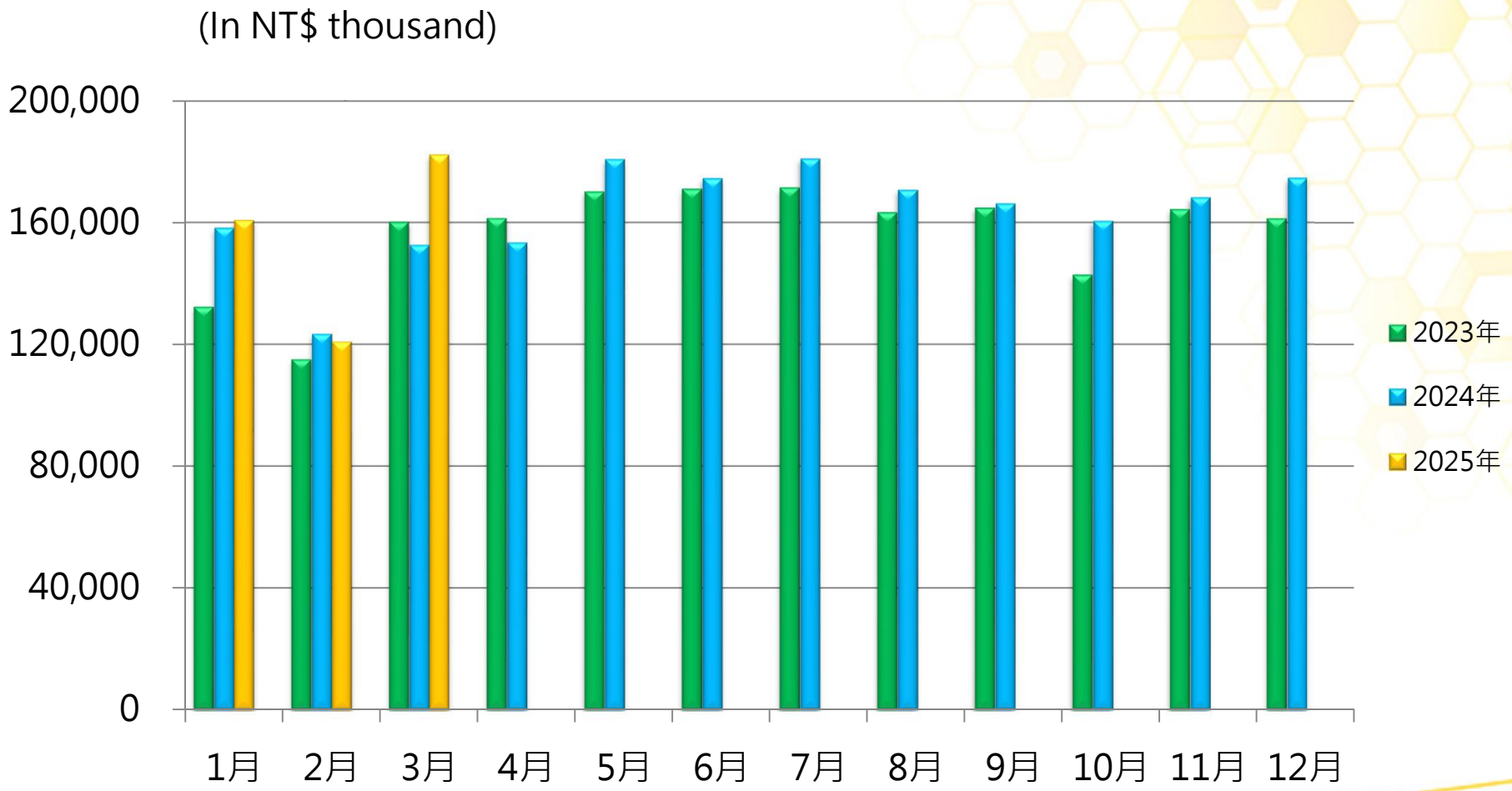
Cash Flows

(In NT$ thousand)	114年Q1	113年Q1
Beginning Balance	1,181,200	622,110
Cash from operating activities	104,325	152,600
Capital expenditures	(259,438)	(404,176)
Proceeds from short-term &long-term debt	207,000	411,000
Long-term loans	(104,589)	(45,864)
Others	3,442	21,934
Ending Balance	1,131,940	713,736

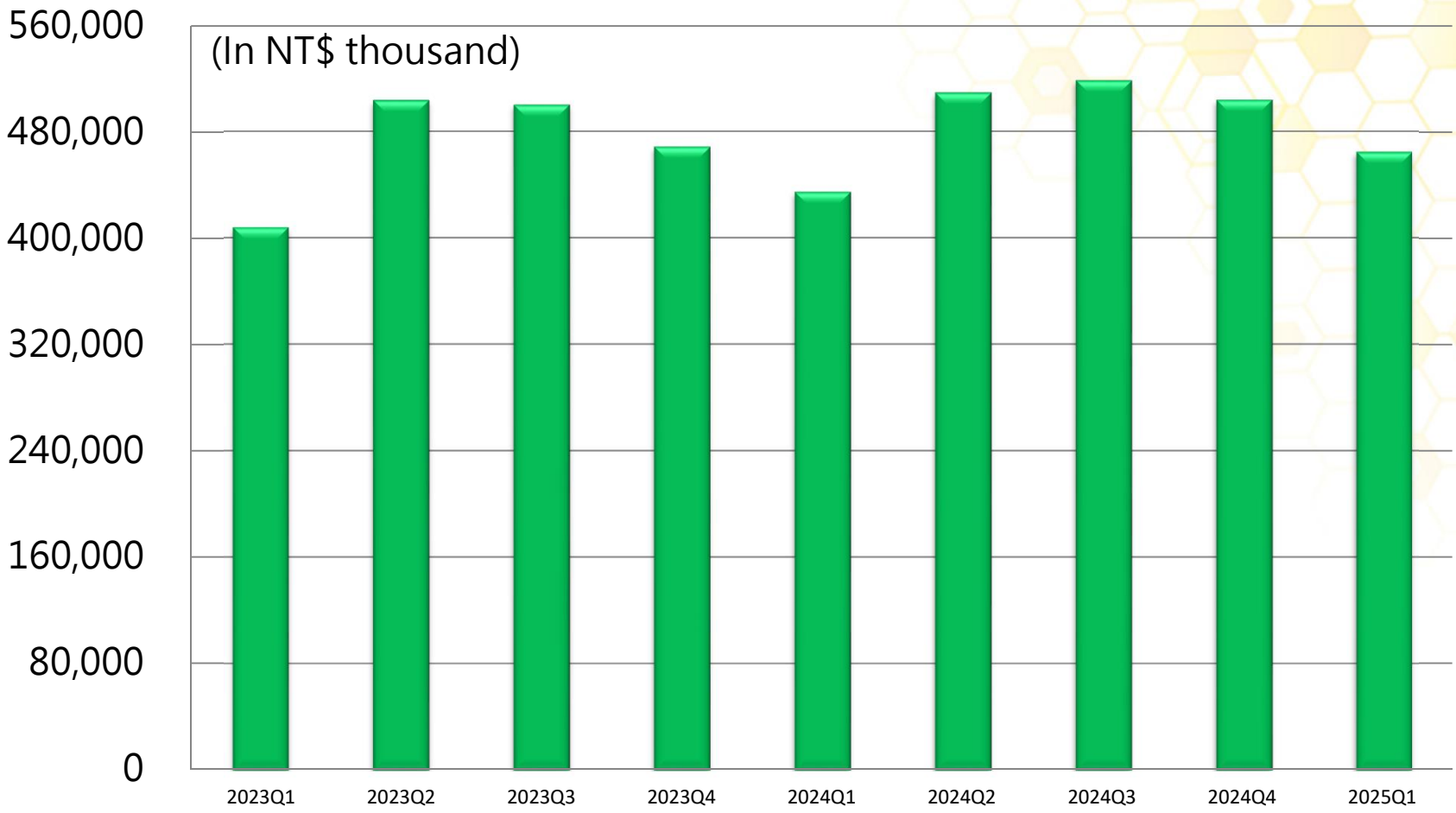
Revenue Compound Annual Growth Rate in the past ten years



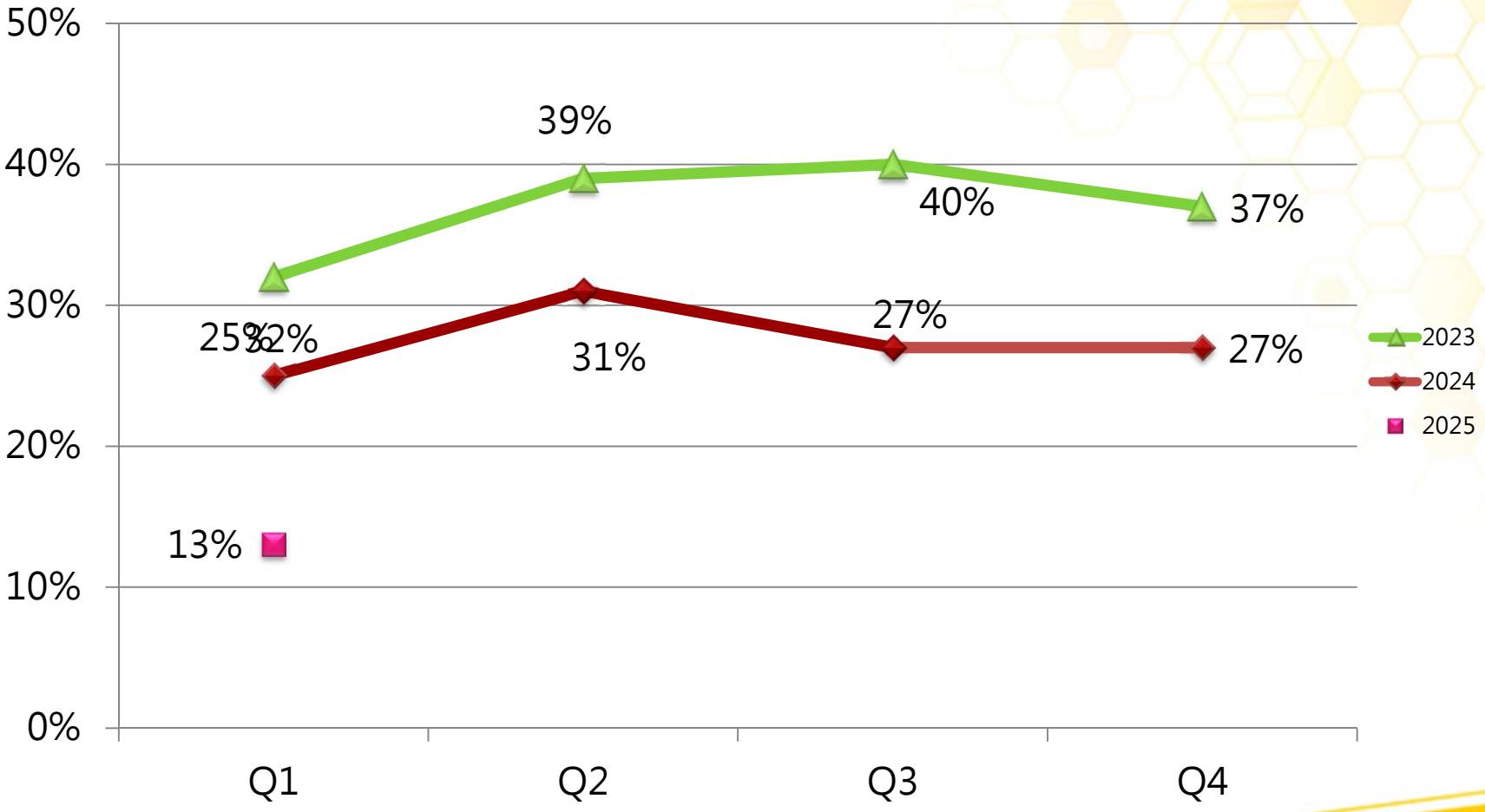
2023~2025 Monthly Revenue Trends



2022~2024 Quarterly Revenue Trends

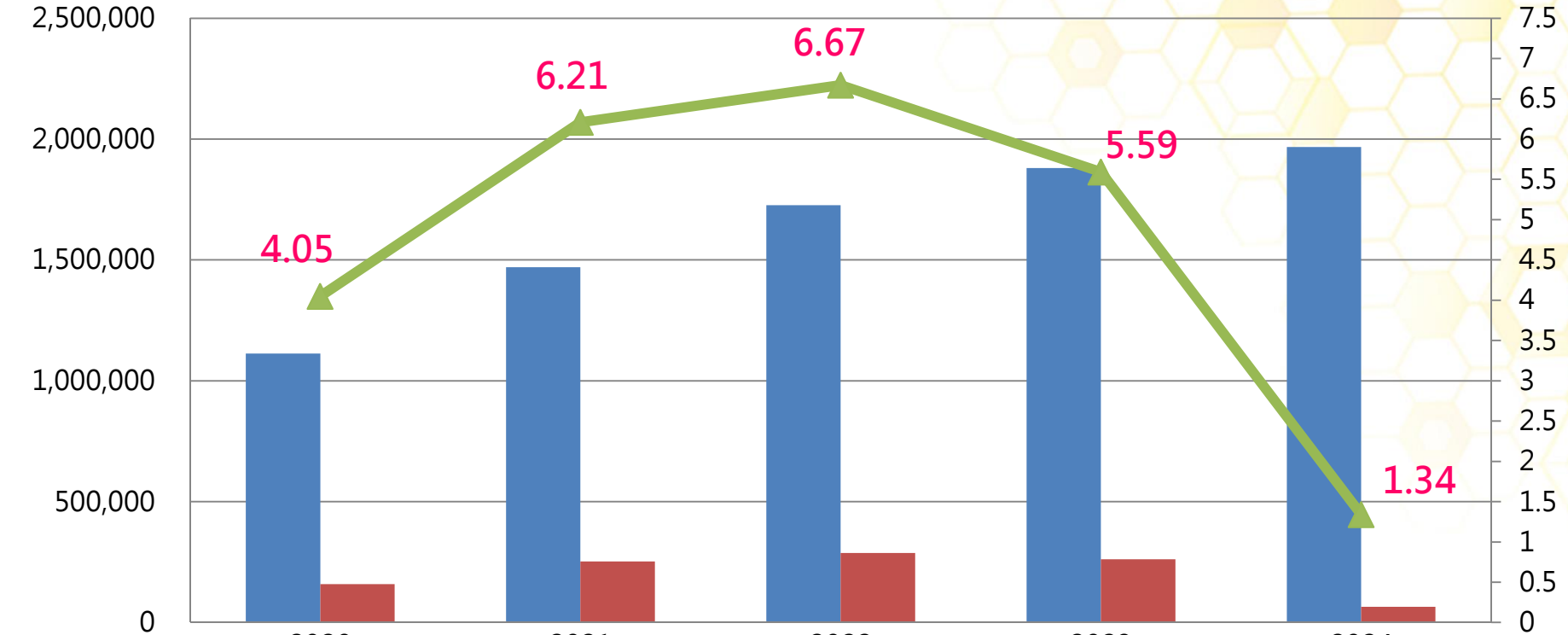


2022~2024 Quarterly Margin



Profitability & Dividend in the past five years

(In NT$ thousand)



	2020	2021	2022	2023	2024
Revenue	1,113,184	1,469,881	1,726,427	1,880,575	1,966,669
Net profit	159,106	252,493	287,998	261,280	64,963
EPS	4.05	6.21	6.67	5.59	1.34
Dividend	**2.5**	**4.5**	**5.5**	**4.5**	**1**

Thank you for listening.

MATERIAL SCIENCE SERVICE

Your best R&D partner

1F,NO.27,Pu-ding Rd., Hsin-chu
30072,Taiwan,R.O.C

+886-3-6663298

service@msscorps.com