



汎銓科技 半導體產業高階製程领航者

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# MSSCORPS. (6830)

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# 2026 Operational Outlook: The Harvest Year

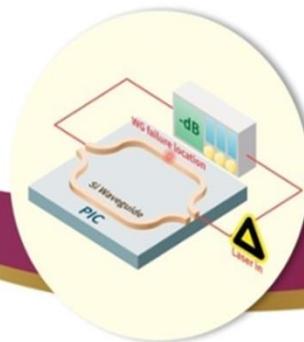
Completed Global Footprint: Taiwan, China, U.S., and Japan — Accelerated Synchronized Growth in 2026



Materials Analysis for the Angstrom-Node Process



Expanding Our AI Customer Base



## Silicon Photonics Division Expands from Service to Equipment Sales

- Developed and assembled three proprietary SiPh analysis systems (patented in Taiwan and Japan)
- Launching PD- and QA-ready SiPh testing equipment in 2026
- Transitioning from technical services to equipment commercialization, creating a new business model

# Deepening Technology Capabilities in the Angstrom Era

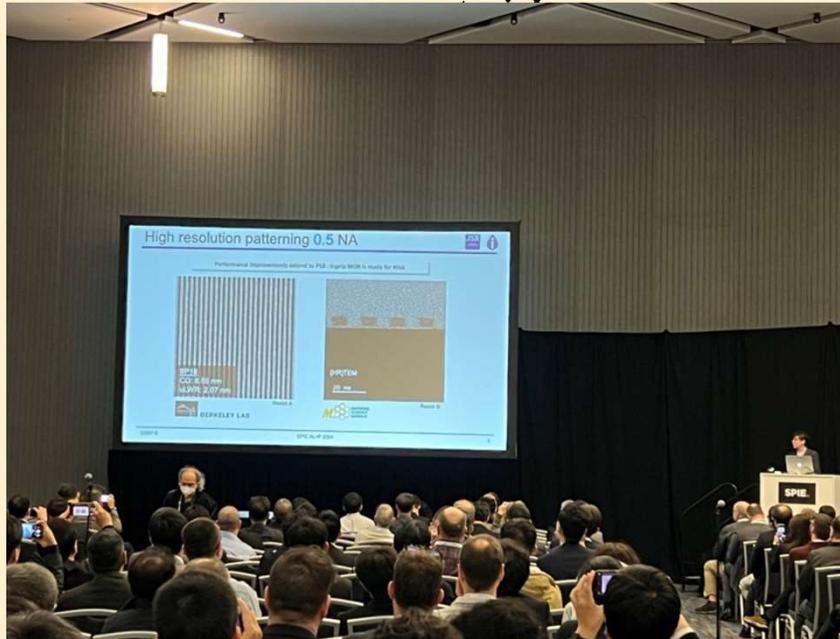


As advanced semiconductor manufacturing enters the Angstrom-node era, MSSCORPS continues to strengthen and specialize in next-generation analytical technologies, including MOR materials analysis and APT. The Company has completed the establishment of the SAC-TEM Center, which has recently passed customer audits and is set to commence operations, contributing to revenue growth.

## MOR – Ultra-Sensitive Materials Analysis

Entering High-NA EUV Next-Generation Materials Analysis

Establishing a strategic entry point into advanced



## Atomic-Scale Analysis Technology: APT

Providing atomic-scale compositional and defect analysis capabilities

Pushing the frontier of analytical technology

APT：原子級精度的先進製程材料分析技術

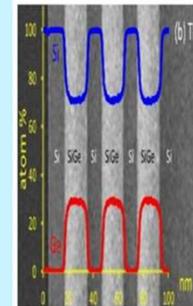
EDN  
TAIWAN

作者：汎銓科技

類別：設計揭密

2025-12-09

(0) 評論



原子針尖斷層影像儀(APT)具備原子級空間解析與高靈敏度化學分析能力，能精確重建三維原子分佈，以因應先進製程與埃米級材料分析挑戰...

# CS-TEM Facility Deployment and Equipment Installation

## State-of-the-Art TEM Infrastructure

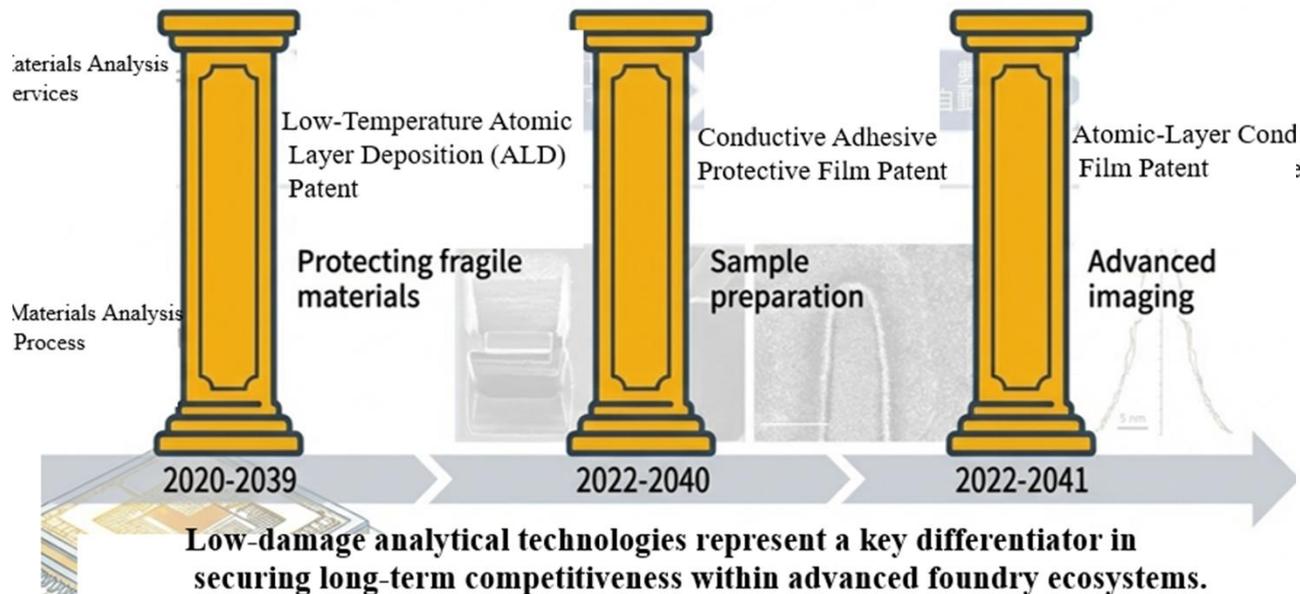
Enhancing comprehensive materials analysis capabilities

Supporting advanced process R&D and volume production demands

The SAC facility is built to world-class materials analysis standards, featuring a fully controlled environment and precision instrument installation space. The facility design meets stringent semiconductor industry requirements for vibration isolation and electromagnetic shielding.

## Strengthening Our Proprietary IP Portfolio

### Building High Barriers to Entry Through Technology Leadership



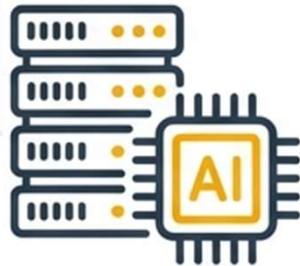
# 2026 and Beyond – Four Strategic Growth Engines



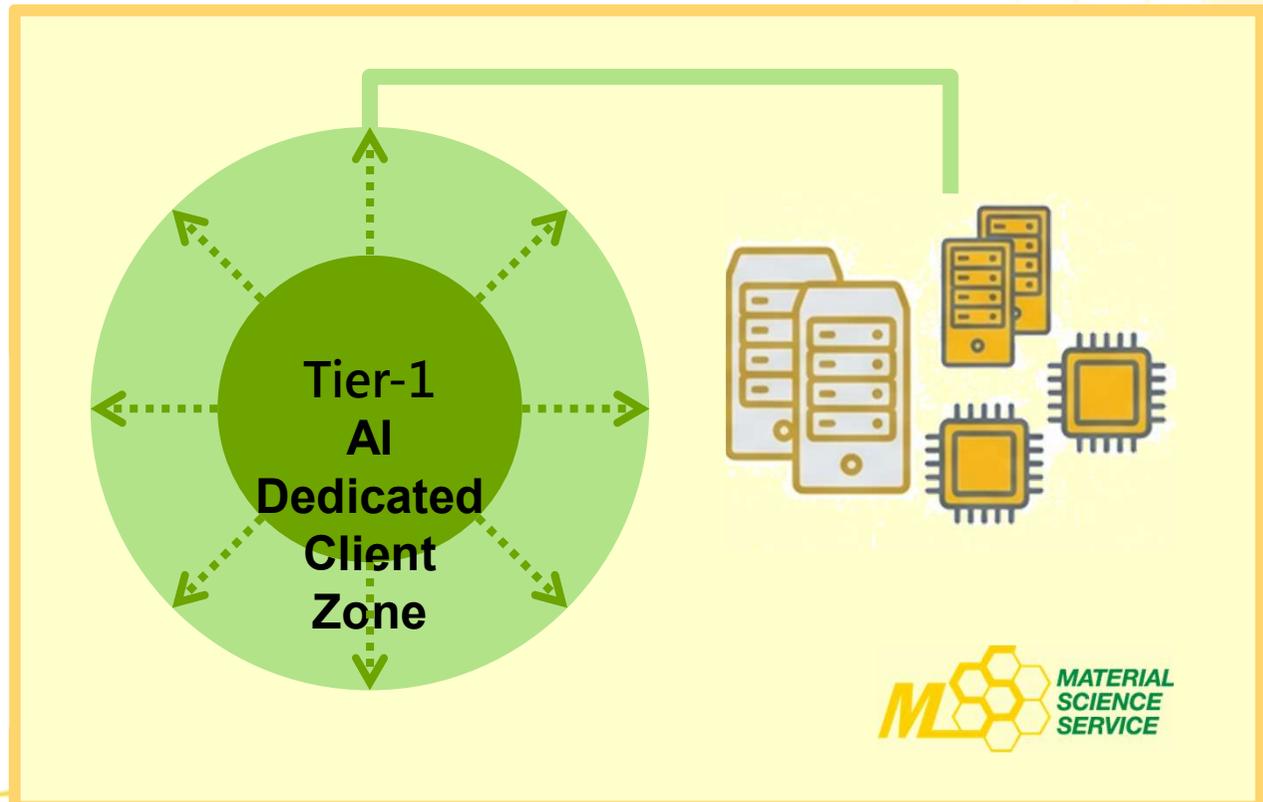
## Scaling the Zhubei AI Client Hub to Support Tier-1 AI Industry Leaders

### Expansion of the Tial-1 AI Client Zone

Tier-1 AI customers have partnered with MSSCORPS to establish a dedicated **AI Client Zone**, with continued expansion underway. Amid explosive growth in AI chip demand, requirements for advanced packaging and heterogeneous integration analysis have increased significantly. MSSCORPS has become a key strategic partner to leading U.S. AI semiconductor manufacturers.



- Exclusive AI Zone:** Premium security protocols and priority production support
- Sustained Tier-1 Growth Momentum:** Continued expansion of demand from leading AI players
- Strategic Co-Development:** Early involvement in advanced AI chip and silicon photonics innovation



# Business Model Transformation: From Silicon Photonics Testing & Analysis to Equipment Sales



## Measurement & Localization | Patented Technologies

Building a technology moat and establishing differentiation

### Patent-Protected Silicon Photonics Measurement and Failure Localization Technologies

事由：臺灣發明專利核准領證通知  
申請人：汎銓科技股份有限公司  
專利名稱：光損偵測裝置  
發明人：柳紀綸、周學良、李宗育  
申請日期：2023/09/06  
申請案號：112133805  
本所編號：ITW230090

## In-House Equipment Platform 「Helmet Gecko」

# MSS HG





# MSS 全球佈局運營

業務推廣



上海辦公室

MA



南京廠房

MA



深圳廠房

MA



川崎廠房

MA / FA



Sunnyvale 廠房



竹北營運三廠 (建廠中)

MA/ FA/ AI 專區



竹北營運二廠

MA



竹北營運一廠

FA/ AI 專區



RA 驗證中心

RA



南科廠房

MA



SAC-TEM Center

MA (14A/10A)



台灣

總部

本部

FA/ SA/ 矽光子

MA

日本

美國

# Semiconductor equipment/materials research and development



# Analytical Technology Segmentation & Growth Potential

Category	Service Type	Technology Platform	MSS niche	2024Q4 Revenue proportion	2025Q4 Revenue proportion	Expected growth in 2026-2027
Advanced processes (Angstrom era)	MA	PR protection technology	3rd generation EUV PR protection technology	54.6%	47.7%	
	MA		Advanced EUV PR protection technology			
	MA		Selective deposition sample preparation technology			
	MA	low-k protection technology	BEOL: low-k structure protection technology			
	MA		BEOL: low-k damage analysis technology			
	MA		Novel 2D materials analysis method			
	MA	Ultra-thin sample method	Ultra-thin sample protection method			
	MA		FEOL: GAA etch byproduct bonding state analysis			
	MA		MEOL: ALE etch byproduct comparison platform			
MA	Auto-measurement	High aspect ratio structural TEM analysis technology				
MA		Artificial intelligence for automatic measurement				
Mature processes	MA	ML ball height/ML defect	Optical component analysis technology: ML ball height/ML defect	12.7%	7.7%	
	MA		Wearable device AR/VR product lens integration analysis			
	MA	Compound Semiconductor	Epitaxial defect quantitative analysis technology			
	MA		Carrier concentration distribution analysis in compound semiconductors			
	MA		Integrated stress analysis technology			
	MA	OLED	Ultra-low contrast imaging technology for layer structures			
	MA	CCL/FCCL	Soft material slicing technology			
MA		General materials analysis (SEM/FIB CS/Reversed MA/SIMS)				
IC failure analysis	FA	Compound Semiconductor	High voltage and high temperature test (1000V, 300C)	10.1%	7.9%	
	FA		Ultrathin sample preparation technology for EFA			
	FA	Circuit edit technology	Signal lead technology			
	FA		Backside signal lead technology			
	FA		Adding external multiple passive components technology			
	FA		Precise local RDL removal technology			
	FA		Flipchip front side FIB technology			
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	6.3%	7.8%	
	FA		Light characteristics and attenuation detection for silicon photonics			
	FA	Silicon photonics photoelectricity test	Optical path abnormality positioning, circuit break, light leakage detection for silicon photonics			
	FA		12-inch silicon photonic photometric platform with fully automatic light scanning			
	MA		Advanced package			
	FA	FA for advanced process chips	3nm製程去層次技術/um to nm positioning, direct nano probe measurements on devices			
	FA	Advanced package	Large IC packaging and carrier board separation technology/THZ-TDR open /Thermal xyz fault isolation/3D Xray			
Abroad	MA	Specialized ALD Deposition & Ultra-Thin Film Technologies	Advanced Photoresist Protection / Low-k Structure Protection / High-Aspect-Ratio TEM Technologies	16.2%	29.1%	
Silicon Photonics Testing Equipment Sales (HG Line)	Equipment Sales	Silicon Photonics Testing Equipment	Optical loss inspection systems entering revenue phase Supporting SiPh chip failure analysis applications Capacity expansion aligned with growing demand from high-speed optical module and broader photonics markets			



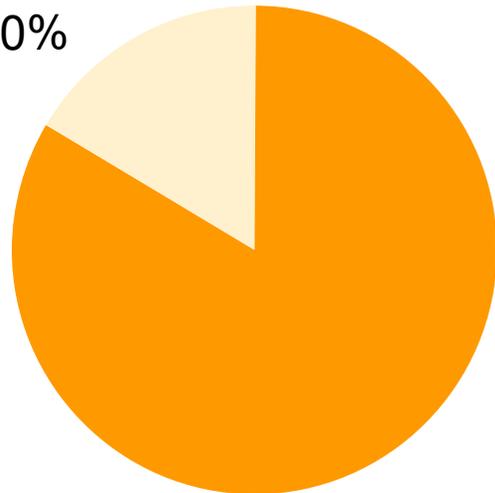
Thank you for listening, and welcome your guidance

Q&A

## Key Institutional Investor Focus: Changes in Market Landscape

Overseas 2024 Q4

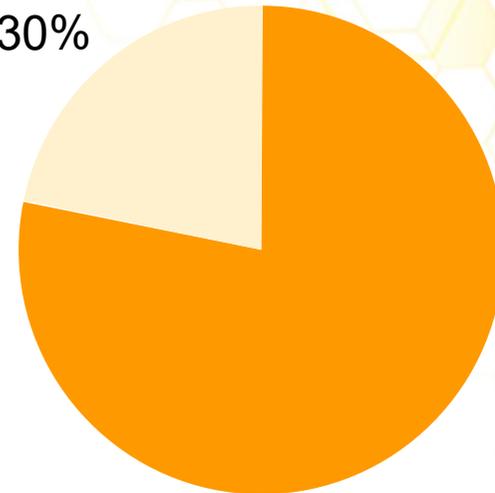
15% ~ 20%



Taiwan

Overseas 2025 Q4

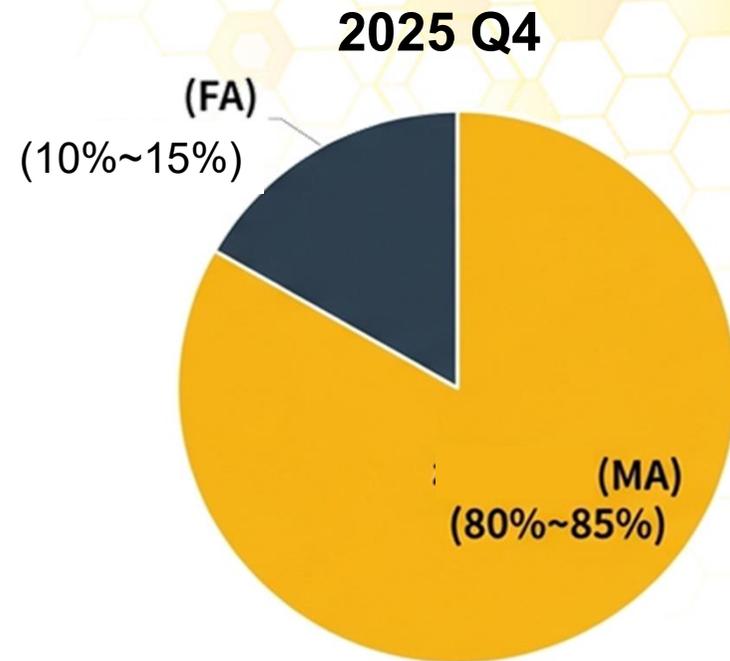
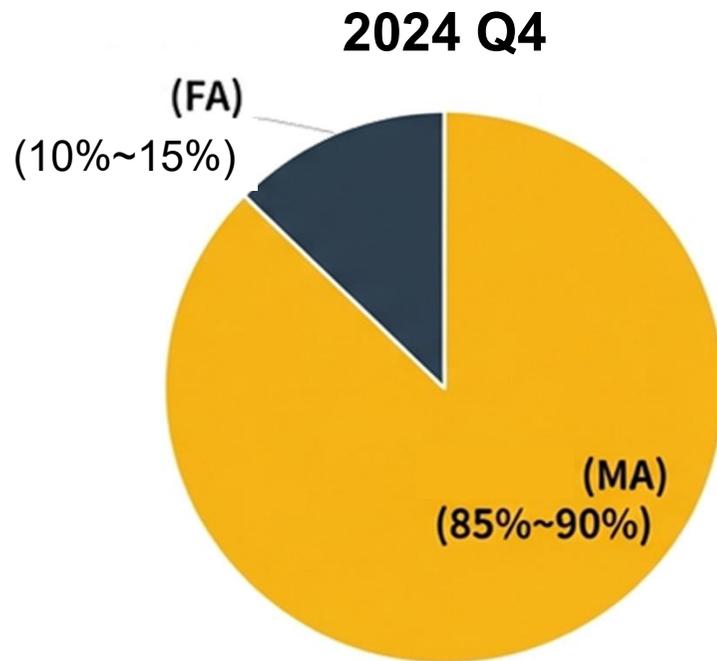
25% ~ 30%



Taiwan

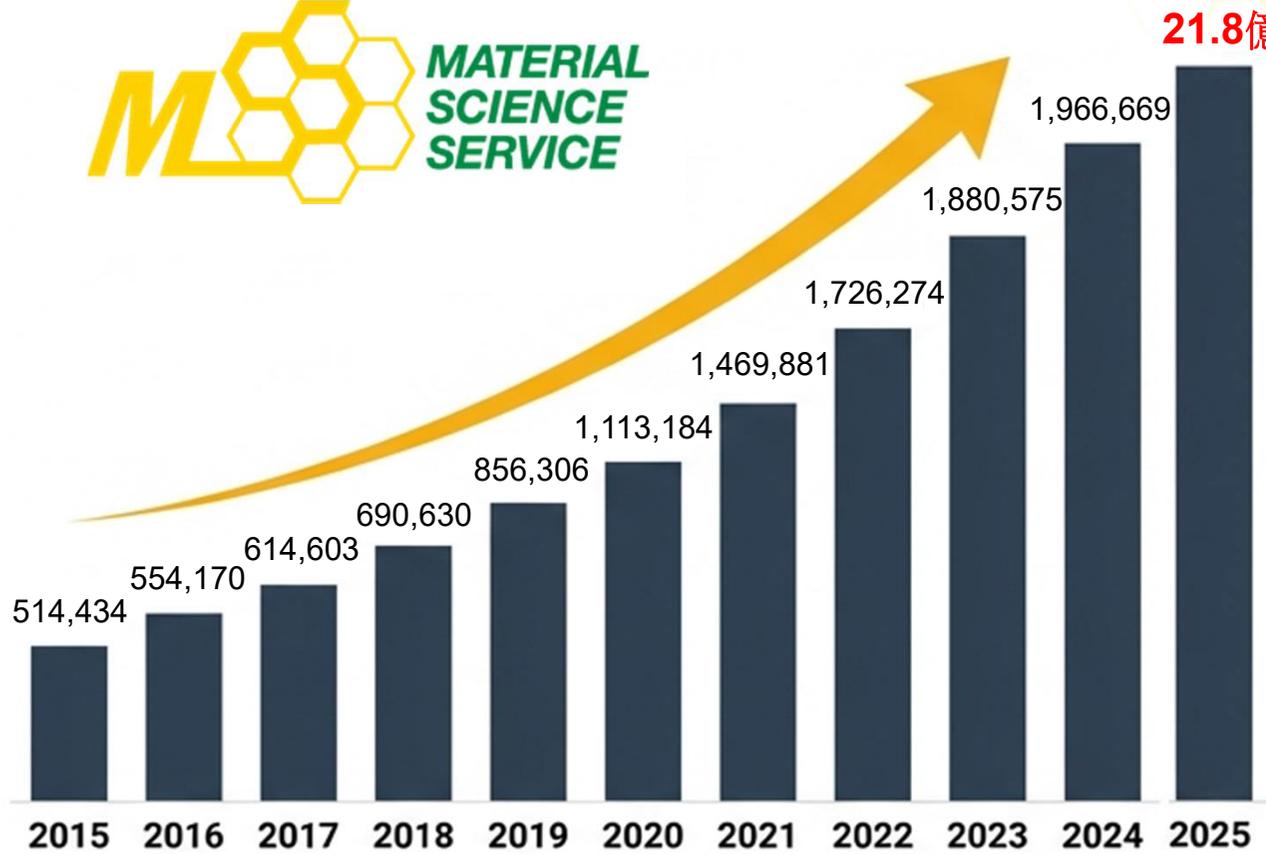
- ◆ Changing global market dynamics are opening new growth avenues and influencing our strategic positioning.
- ◆ Revenue exposure to Mainland China continues to rise, driven by accelerated semiconductor development and increasing demand for advanced materials characterization services

# Key Institutional Investor Focus: Changes in Market Mix



Sustained >80% Mix of High-Barrier MA Services  
Ensuring a Structurally Superior Gross Margin Profile

# Strategic Inflection Point: From Steady Profit to Structural Explosion



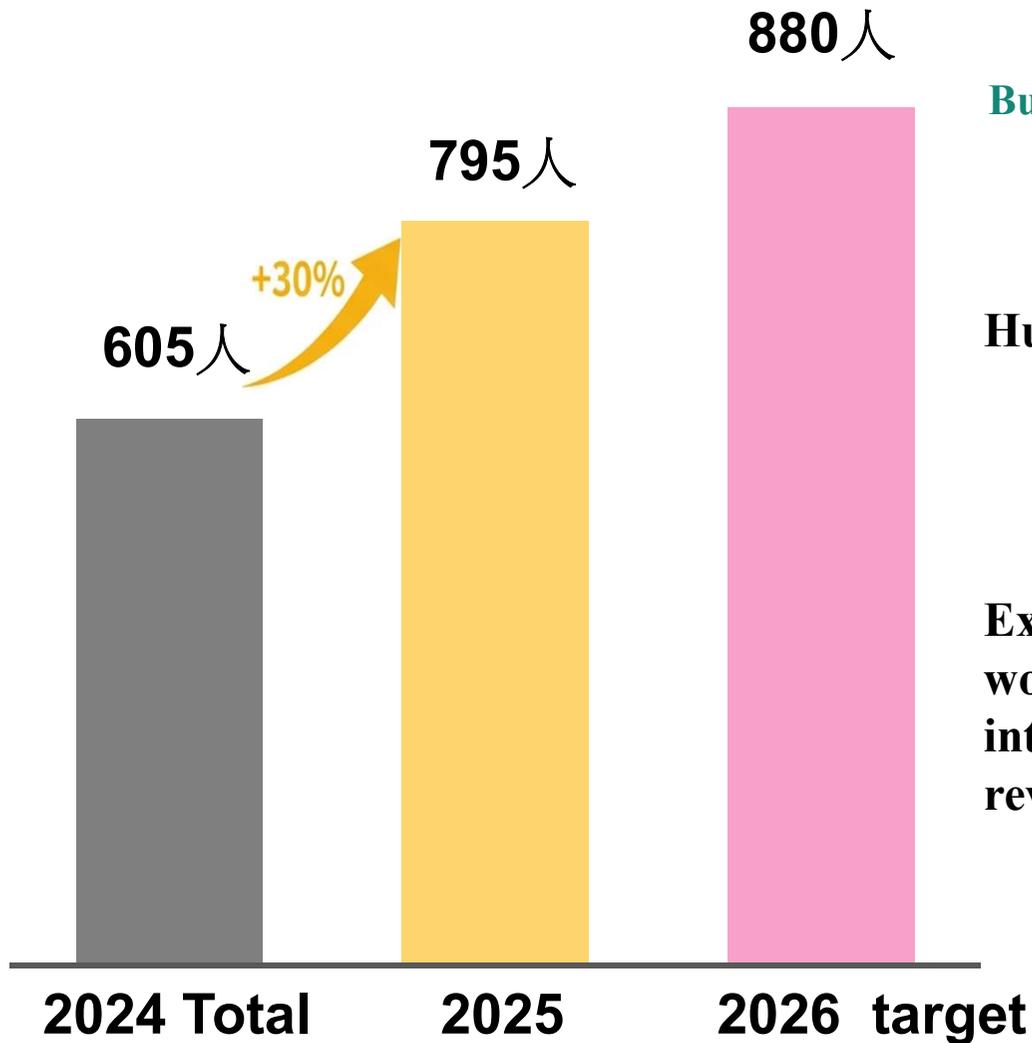
**Four Major Growth Drivers for 2026**

Four icons representing growth drivers for 2026:

- Angstrom Generation**: An icon of an atom with a central nucleus and three orbiting electrons.
- Silicon Photonics**: An icon of a microchip with a central square containing a stylized 'S' and a yellow arrow pointing to the right.
- AI Zone (Expansion of US Clients)**: An icon of a server rack with a yellow square containing the letters 'AI' in the foreground.
- Global Layout**: An icon of a globe with yellow location pins and yellow arrows connecting different regions.

**2015-2025 Revenue Compound Growth Rate (CAGR)**

## Talent Arms Race: Preparing for Explosive Demand in 2026



**Strategic Investment in Human Capital.  
Building a Strong Foundation for Sustainable  
Future Growth**

### **Human Capital as a Growth Multiplier**

- Scaling high-end technical talent aligned with advanced-node demand
- Strengthening silicon photonics testing and R&D capabilities

**Execution capacity begins with people — workforce readiness directly translates into scalable production output and revenue growth.**

# Company Overview

## MSSCORPS CO., LTD. (MSS)

Established  
July 27, 2005

Listed  
Officially listed on  
August 31, 2022

Founder  
Gino Liu Chairman / President

NT\$518 Million

Capital  
NTD

795

Employees  
Technical and Engineering Teams

### Core Service Offerings

- **Materials Analysis (MA)**- Providing advanced process R&D support to foundries and equipment/material suppliers
- **Failure Analysis (FA)**- Assisting IC design houses and manufacturers in rapid root cause identification and defect resolution

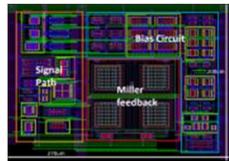
# The role of MSS in the semiconductor industry supply chain-FA

## Item & Positioning

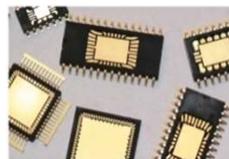
## Content

Failure analysis service

(IC Hospital)



IC Design / Photomask



Packaging / Substrate / Flexible Board / PCB Applications

Resolving IC Design Errors and Identifying Root Causes of IC Failures to Accelerate Time-to-Market

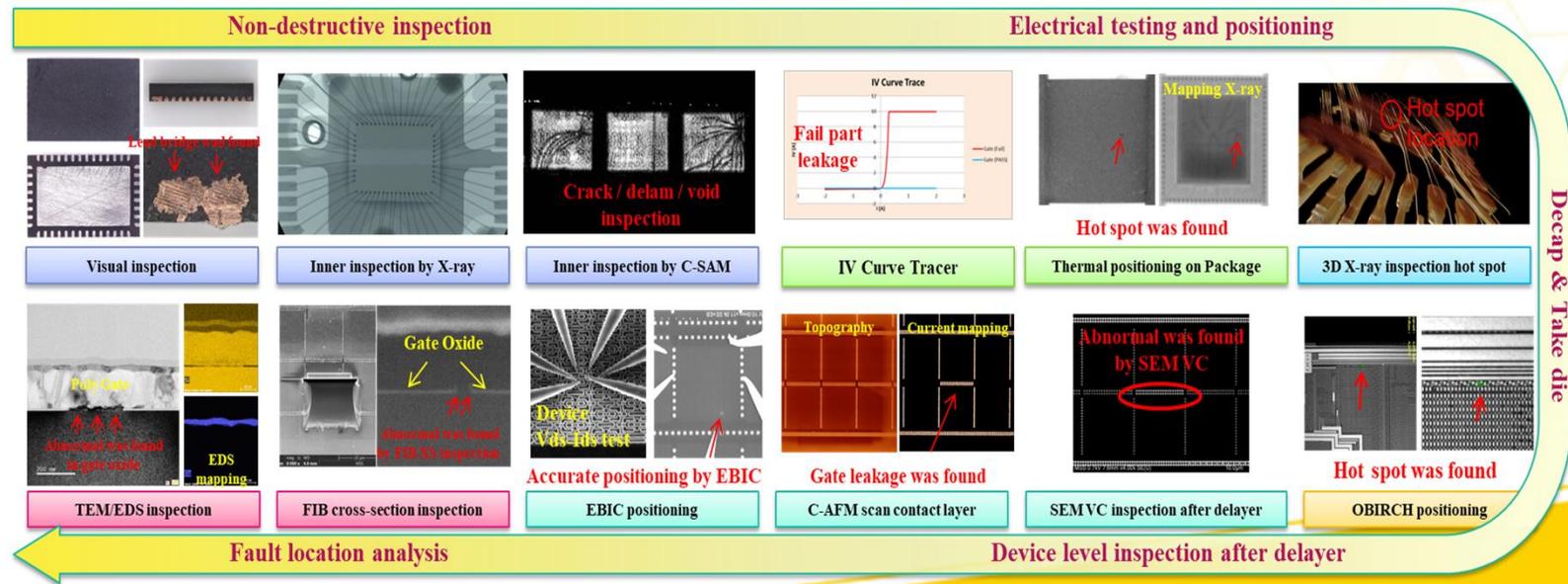
- IC debugging and repair, enabling designers to pinpoint design flaws and validate corrective actions
- Post-production analysis of defective units, including re-measurement, fault localization, structural and compositional analysis using EFA & PFA technologies to determine root causes

**MSSCORPS' Low-Damage Analytical Technologies**

- Originated from leading foundry requirements and extended downstream across the semiconductor ecosystem
- Increasing material diversity, hardness variation, thinner layers, and weaker interlayer bonding demand advanced protection techniques
- Developed proprietary protection processes and patents to minimize thermal and electrical interference and prevent human-induced defects

Failure analysis Process

如何找到失效點?



# The role of MSS in the semiconductor industry supply chain- MA

Positioning

Content

: Materials Analysis(MA)  
(R&D leader)



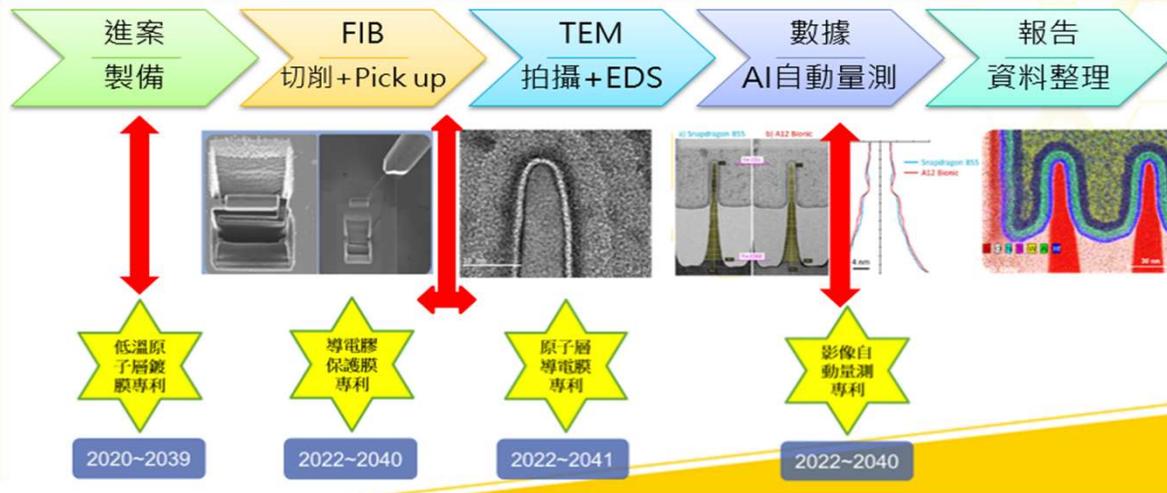
Providing transistor structure and composition analysis enables FAB to quickly achieve the following tasks:  
**If MSS's technology stagnates or slows down, our clients' R&D schedules will be delayed!**  
 1. Developing state-of-the-art processes, determining new equipment models/new materials/process parameters  
 2. Implementing mass production; newly built production line equipment must demonstrate consistency with the RD line  
 3. During mass production, continuously improving production line yield.

Wafer  
foundry/equipment/  
materials

: Materials Analysis(MA)  
Process

Patent Name

Patent Period



# MSS HG

