

# 法人說明會

2024/6/12

系統電  
Sysgration Ltd.  
(TPEX: 5309)



# Outline

1 2024/Q1營運績效

2 事業成長策略

3 美國設廠進展

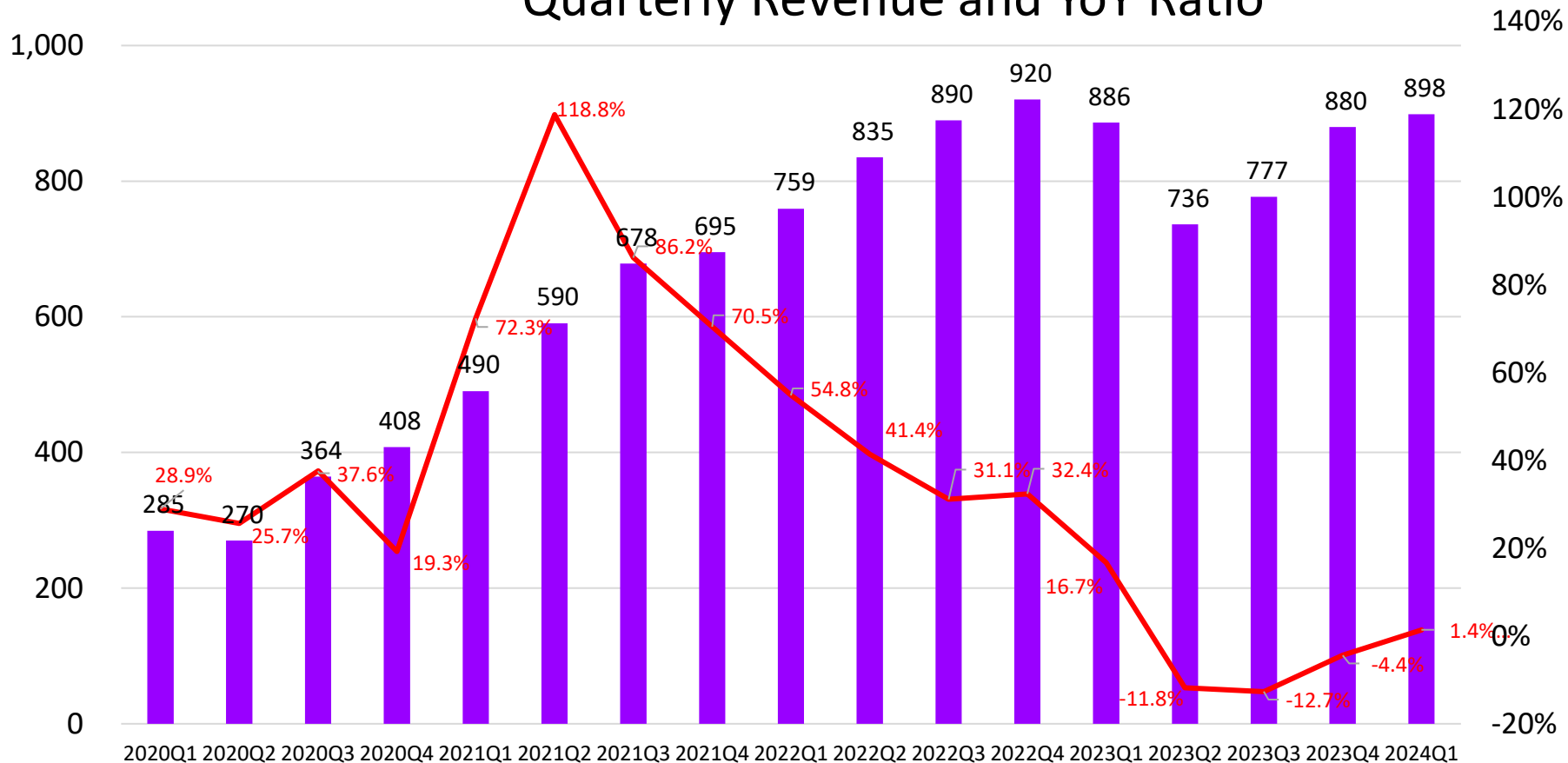
4 ESG永續經營



# 2024/Q1 營運績效

NT\$ M

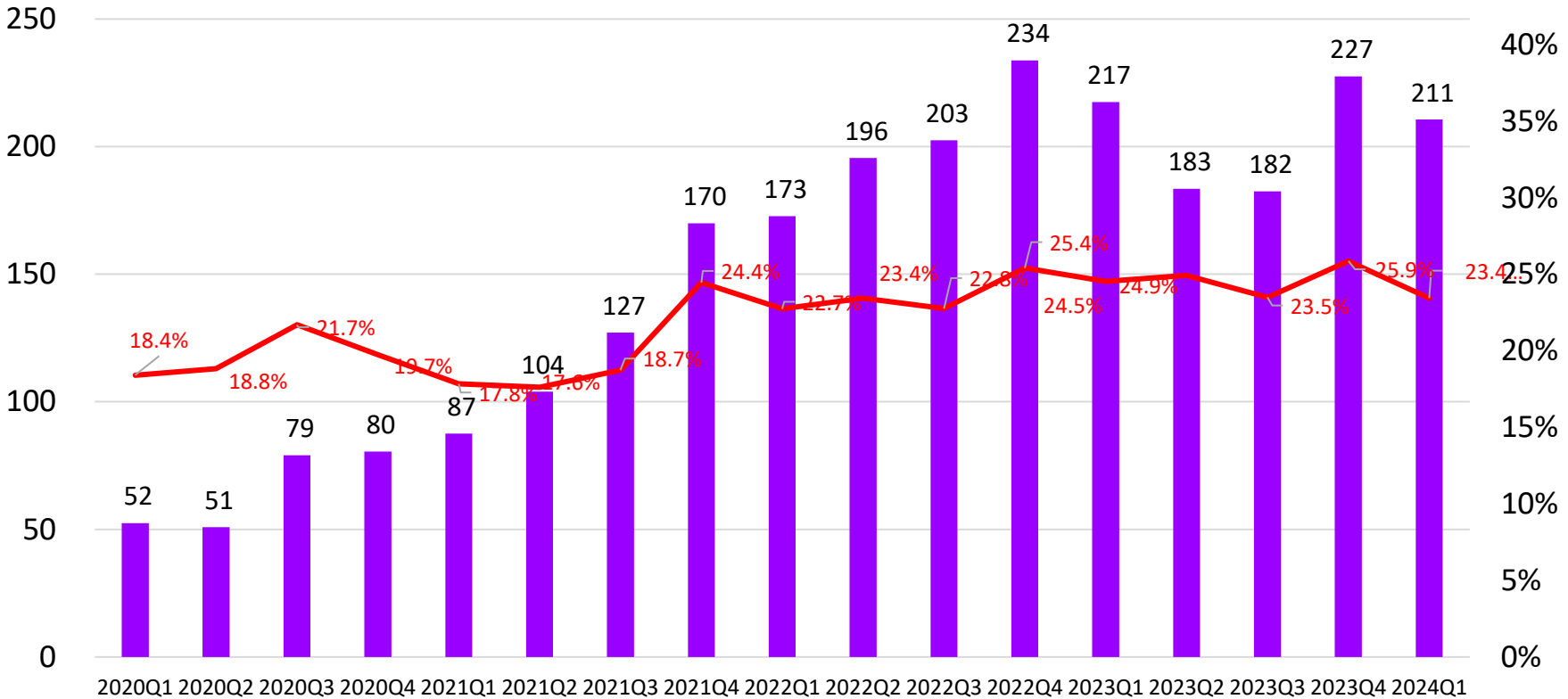
## Quarterly Revenue and YoY Ratio



NT\$ M 300

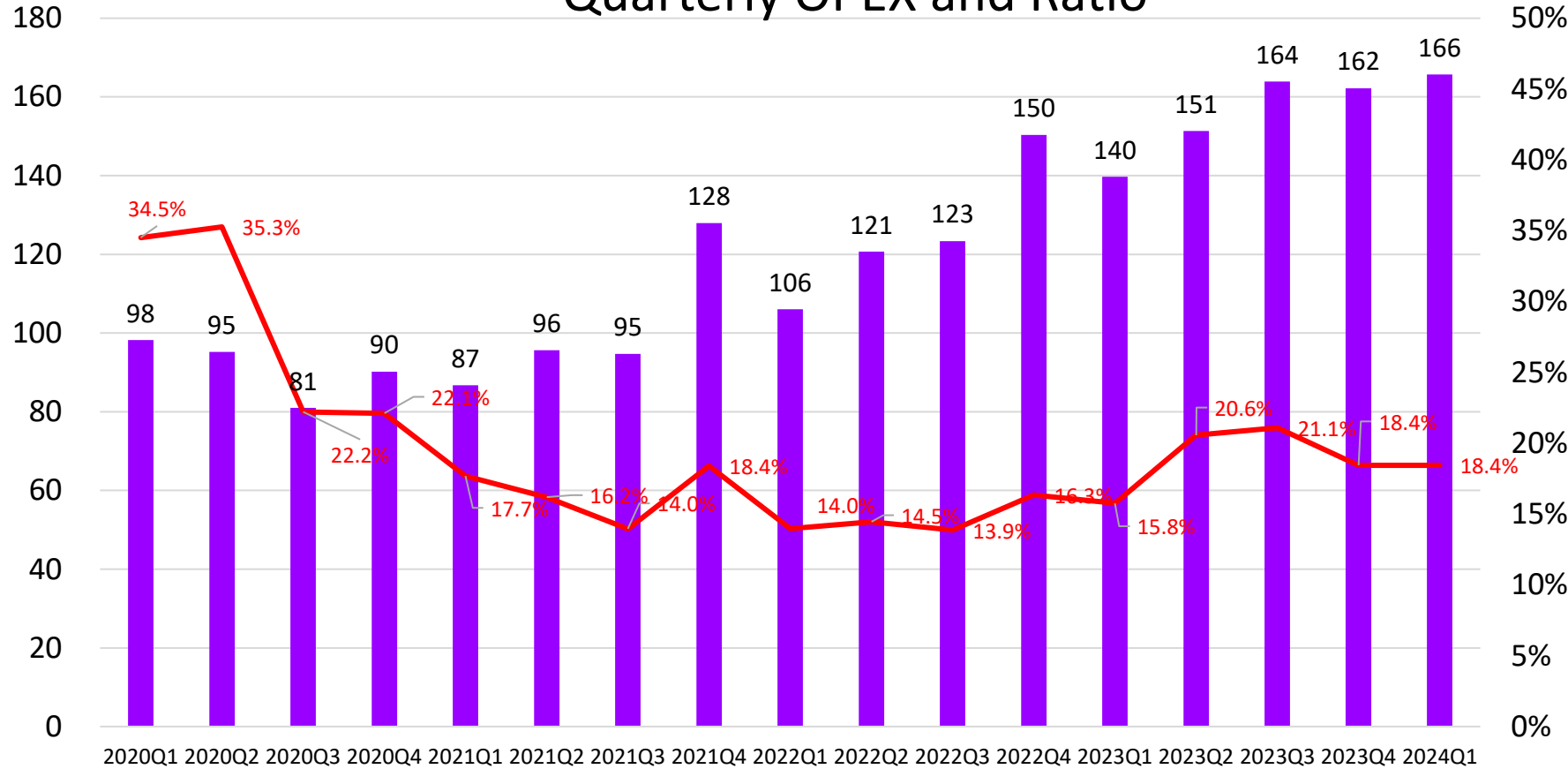
50%

Quarterly Gross Margin and Ratio



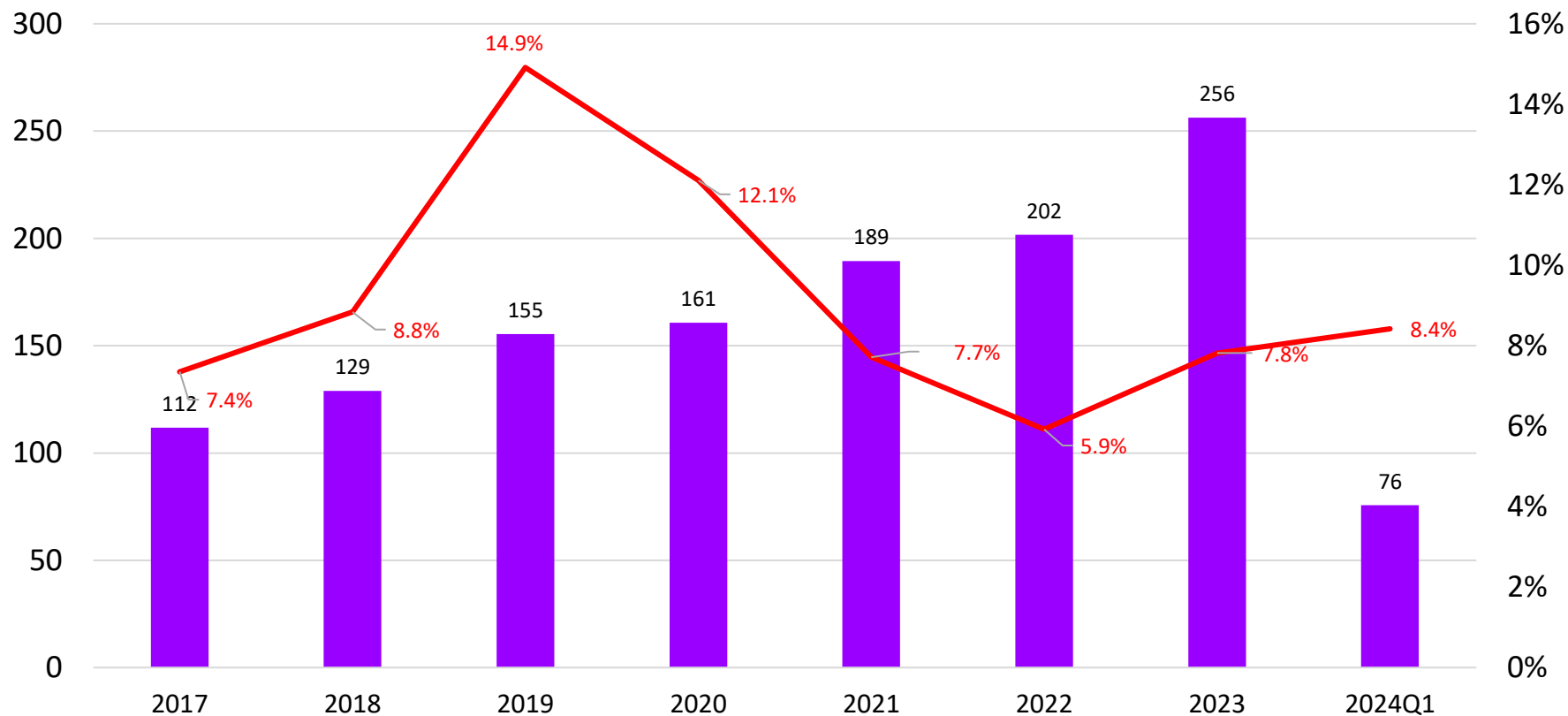
NT\$ M

Quarterly OPEX and Ratio



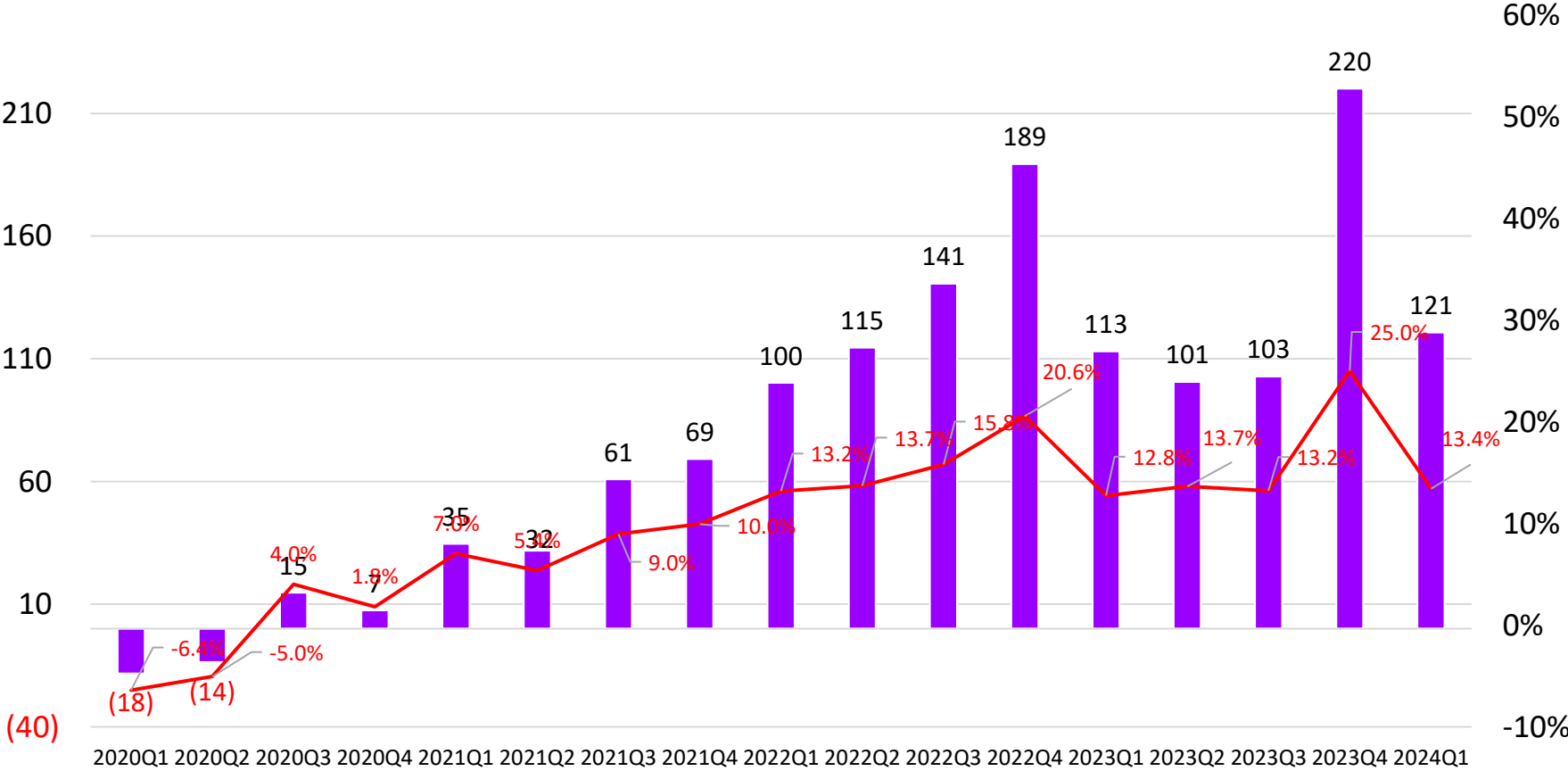
NT\$ M

## RD Expense and Ratio



NT\$ M

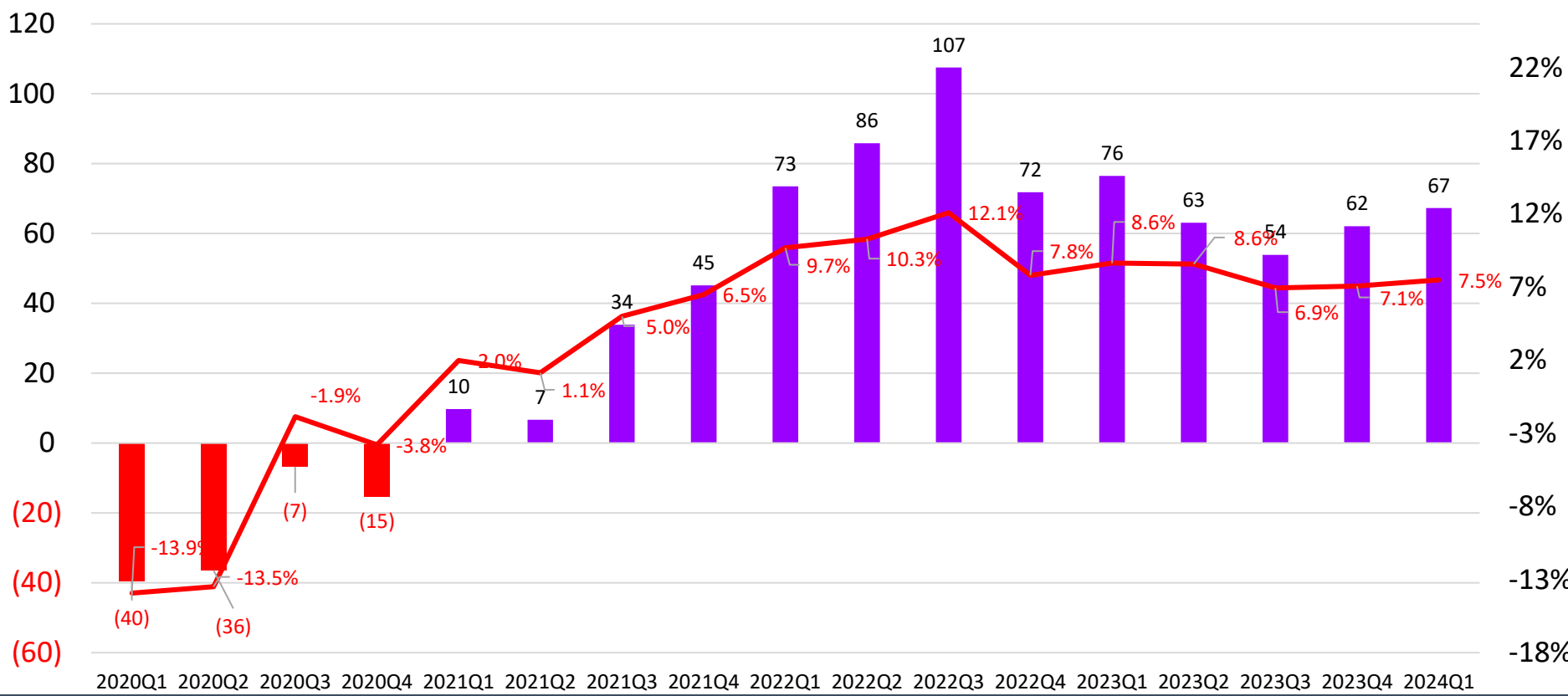
EBITDA and Ratio Over Revenue





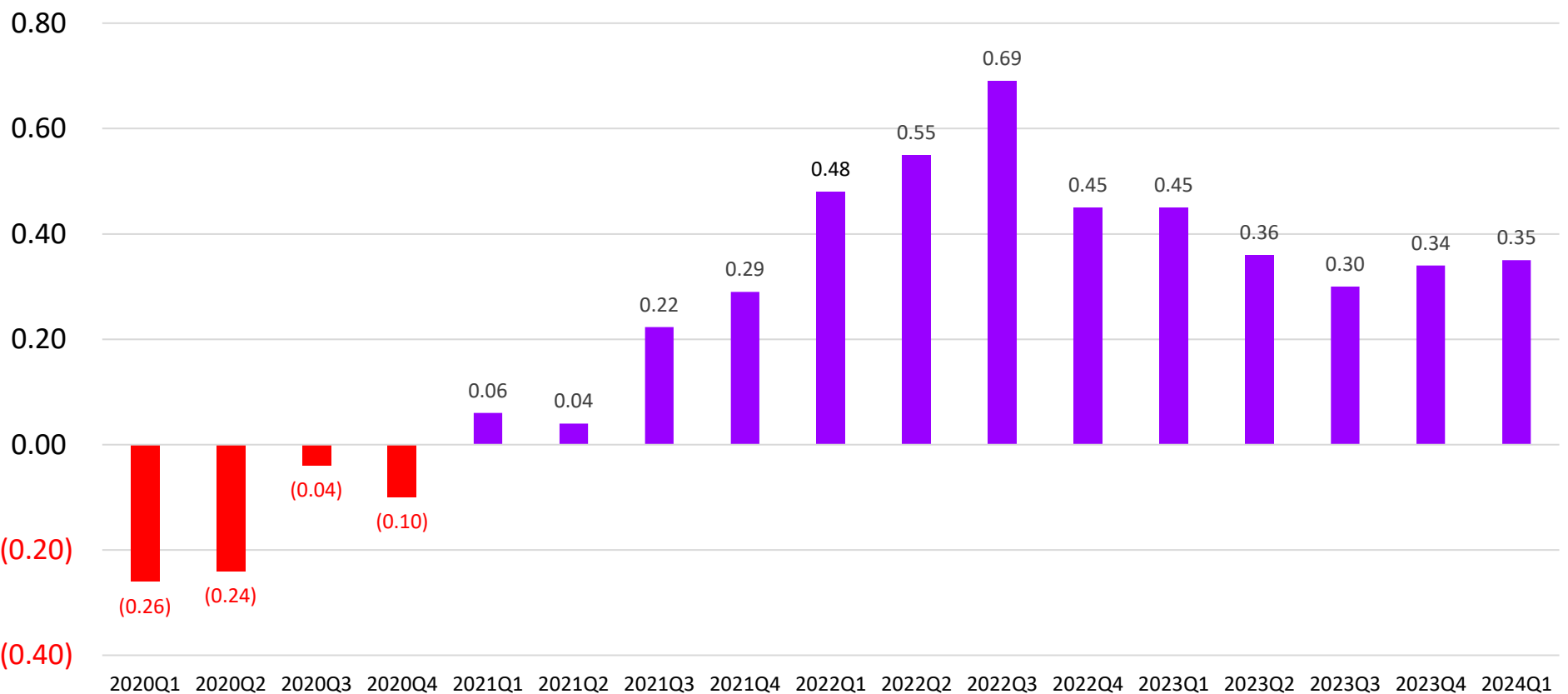
NT\$ M

Quarterly P/L after Tax and Ratio



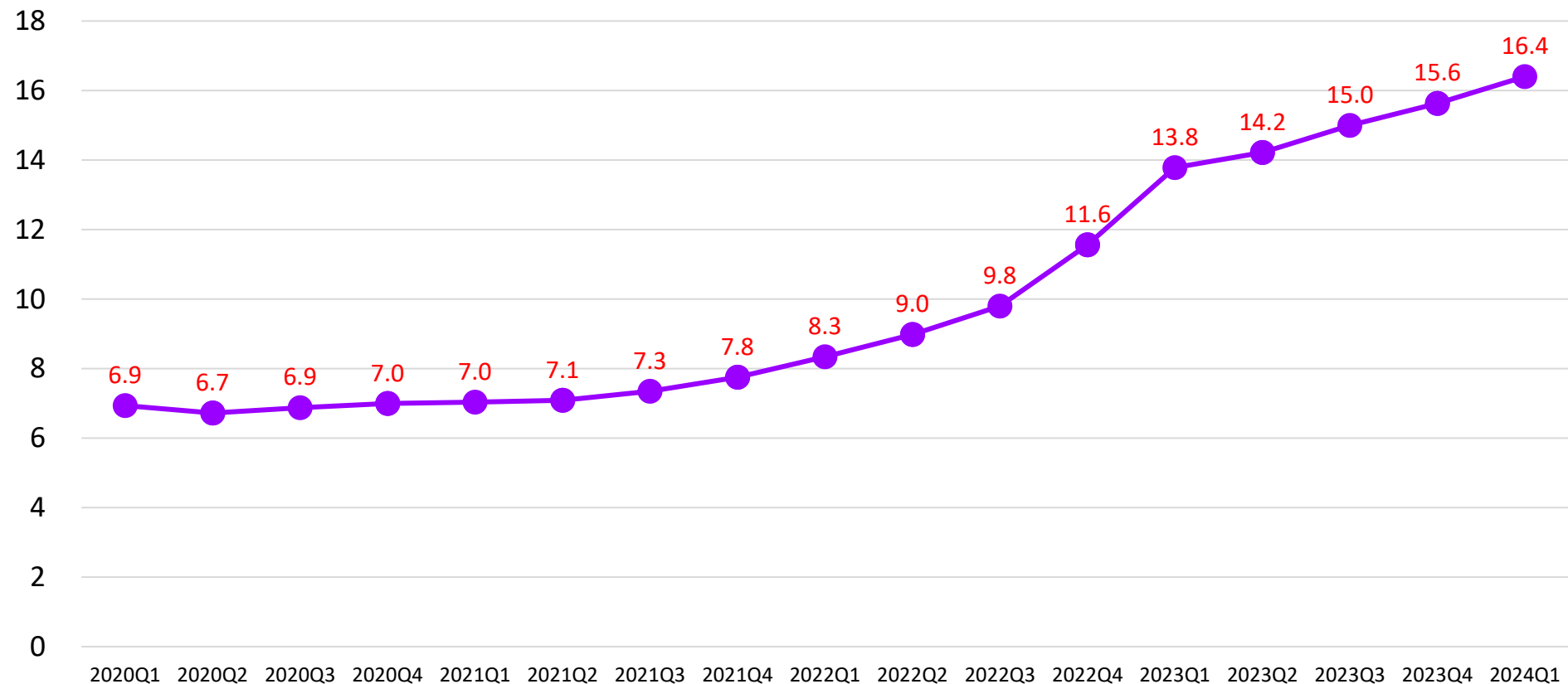
NT\$/Share

Quarterly EPS



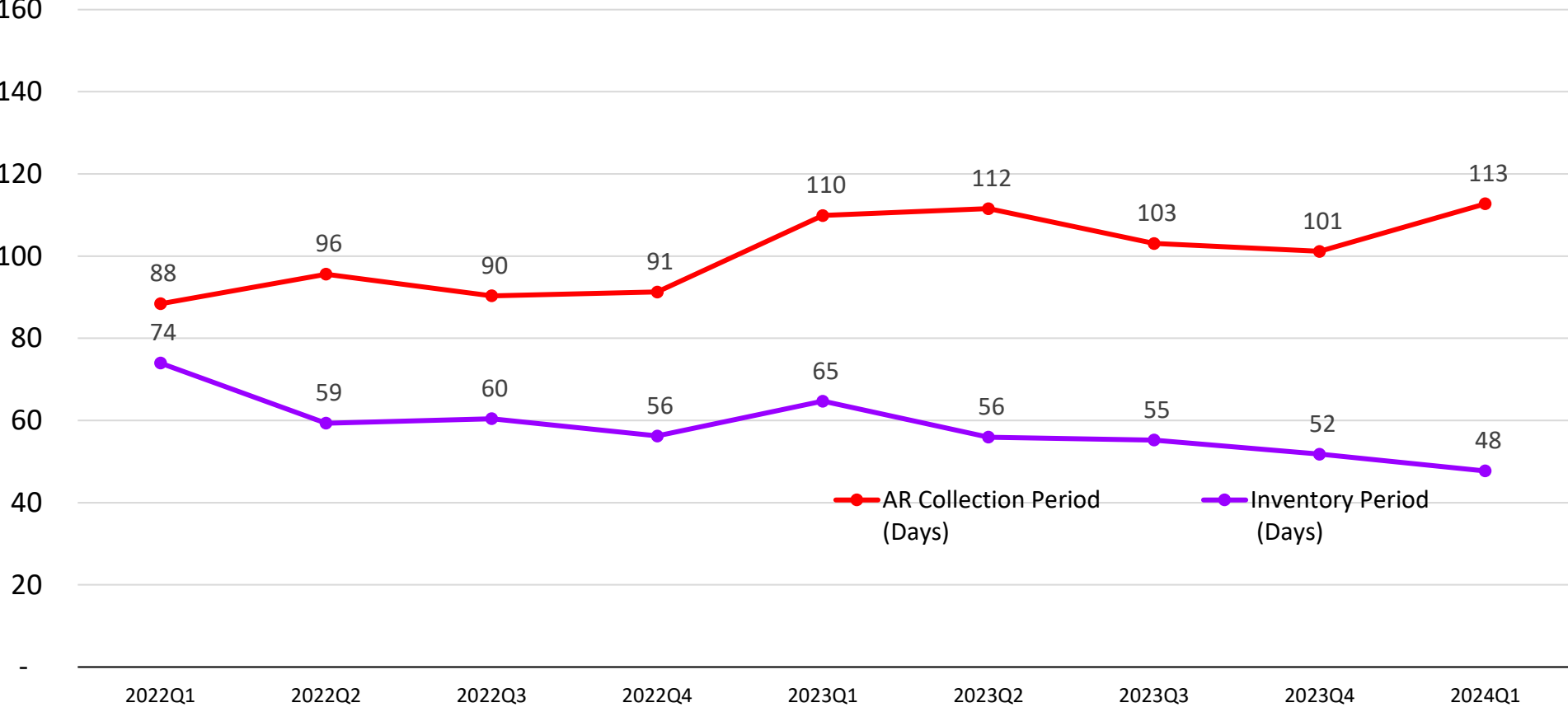
NT\$/Share

## Net Worth Per Share



# 應收帳款與庫存周轉

Days  
AR Collection and Inventory Periods





## 事業成長策略

# 系統電綜觀



**1977**

*Founded*



**550+**

*Worldwide  
Employees*



**40+**

*Years  
Design &  
Manufacturing  
Service Experiences*



**4**

*Locations  
Taiwan - Taipei/NanKang  
China - Huizhou/ZhenJiang*



**5309**

*TW Stock  
Publicly Trade  
Capital: NT\$1.8B  
Market Value NT\$7B*

• Sysgration  
Founded in Taipei,  
Taiwan

• IPO in Taiwan  
(TPEX #5309)

• Rear-Seat  
Infotainment System  
to Germany and  
Spain OE Customers

• BLE TPMS ODM for  
Tire Brand Customer  
• Li-Ion Battery Pack to  
China EV Customer

• RF Dual-Band  
Universal TPMS ODM  
for US Wheel Channel

• BLE TPMS for OE  
Customer  
• PSU for Satellite  
Ground Systems

**1977**

**1988**

**1996**

**2009**

**2011**

**2011**

**2015**

**2016**

**2017**

**2018**

**2020**

**2022**

**2023**

• Taiwan Factory  
Established  
• Started Mouse  
ODM/OEM Business

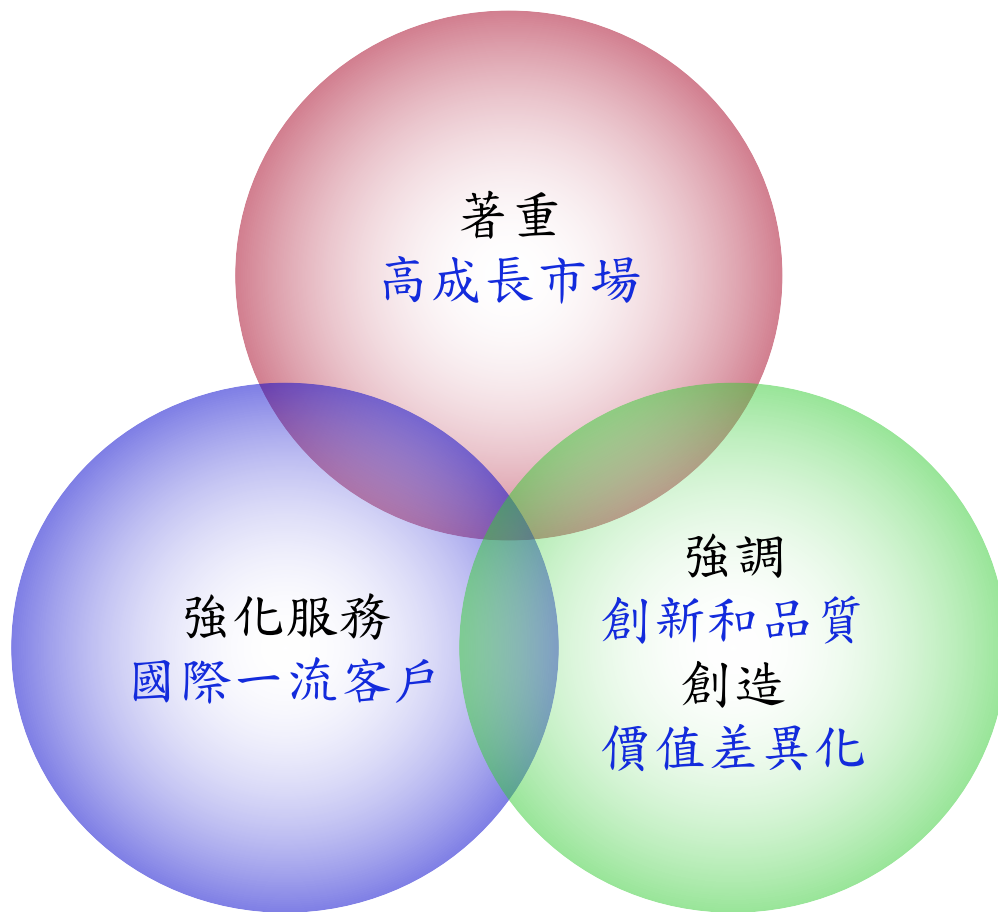
• TS-16949 Certificated  
• Tier-One Supplier of  
Germany OE Customer  
• Rear-Seat Infotainment  
System to Japan Customer

• BLE TPMS ODM for  
China OE Brand  
• RV Control System  
ODM for USA Tier-  
One Customer

• UPS Li-Ion Battery  
Pack for  
Semiconductor Fab  
• Smart Marine Control  
System MP

• Rugged Vehicle  
Terminal for  
Construction  
Vehicle MP





# 經營市場與主要產品

## 車用電子 Automotive Solutions

## 能源管理 Power and Energy Management



Wireless Camera  
Around-View System



Tire Pressure  
Monitoring Systems



Rugged Head-Mount  
AI + AR Device



Li-Ion Battery Pack  
for Semiconductor Fab



Li-Ion Based  
Energy Storage Systems



Body Control Module



AI Industrial PC

100+  
Patents



Infotainment  
System



EV Battery Pack

40+  
Patents



Li-Ion Based  
Energy Brick



Construction/Agriculture Vehicles  
CAGR ~12% by 2025



Electric Vehicles  
CAGR ~80% by 2025



Semiconductors  
CAGR ~25% by 2025



Renewable Energy Storage  
CAGR ~28% by 2025



# 未來成長動力

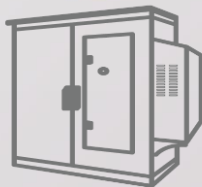


## TPMS

- OE
- Replacement
- Fleet

- Semiconductor Fab
- Community
- Data Center

## LIB Pack



## IPC

- Commercial & Industrial Vehicle
- Rugged Portable/Wearable
- AI-Driven



TPMS



IPC

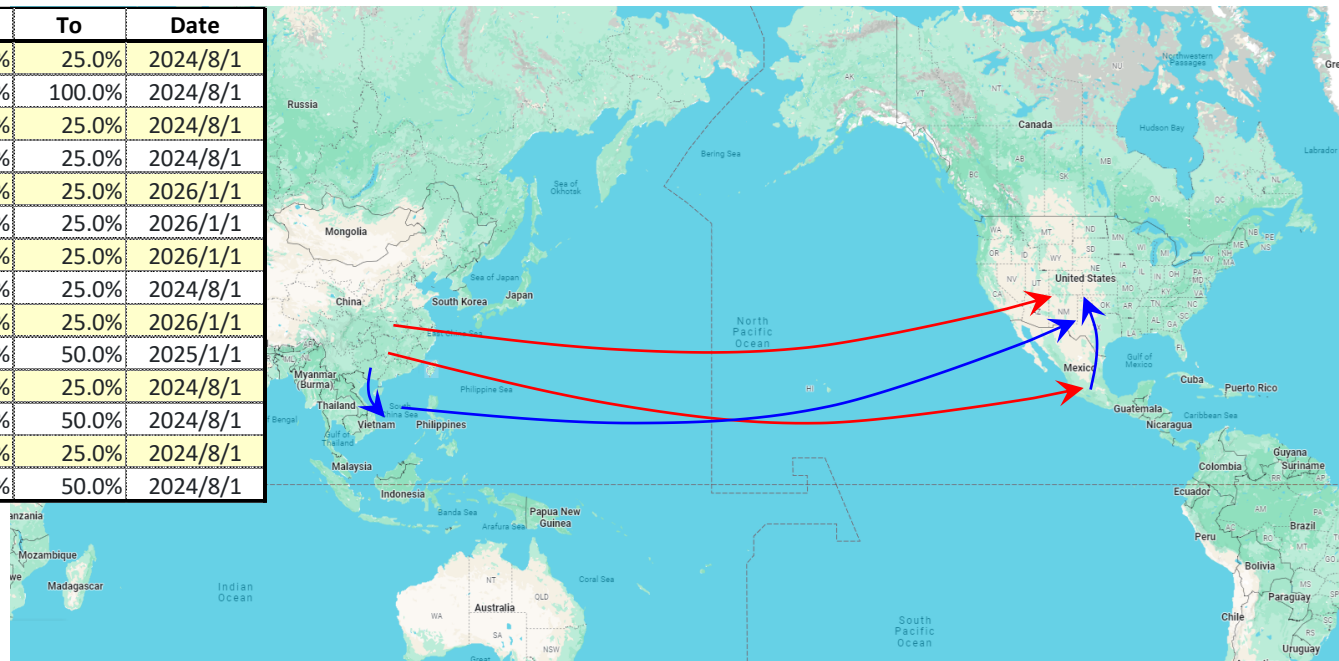


LIB Pack

# 美墨關稅新政策

- ◆ 2024/4/22 Mexico Reinstates Tariff Hikes 5%~50% on 544+ Goods.
- ◆ 2024/5/14 US Tariff Increases on Chinese Imports, ~\$18B of Goods.

Category	From	To	Date
Battery Parts	7.5%	25.0%	2024/8/1
Electric Vehicles	25.0%	100.0%	2024/8/1
Facemasks	0 ~ 7.5%	25.0%	2024/8/1
Lithium-Ion EV Batteries	7.5%	25.0%	2024/8/1
Lithium-ion non-EV Batteries	7.5%	25.0%	2026/1/1
Medical Gloves	0 ~ 7.5%	25.0%	2026/1/1
Natural Graphite	0.0%	25.0%	2026/1/1
Other Critical Minerals	0.0%	25.0%	2024/8/1
Permanent Magnets	0.0%	25.0%	2026/1/1
Semiconductors	25.0%	50.0%	2025/1/1
Ship-to-Shore Cranes	0.0%	25.0%	2024/8/1
Solar Cells and/or Modules	25.0%	50.0%	2024/8/1
Steel and Aluminum Products	0 ~ 7.5%	25.0%	2024/8/1
Syringes and Needles	0.0%	50.0%	2024/8/1

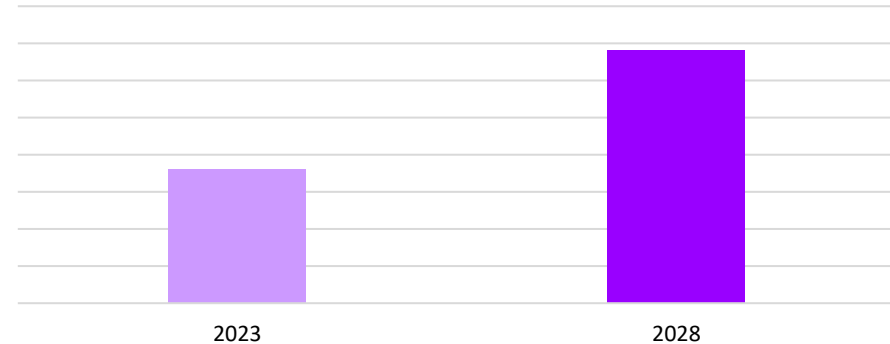


# 胎壓偵測器成長趨勢

- ◆ 2023~2028 CAGR > 13%.
- ◆ Largest Market: North America.
- ◆ Fastest Growing Market: Asia-Pacific.
- ◆ New Geopolitical Growth Opportunity in North America and Europe OE Makers.



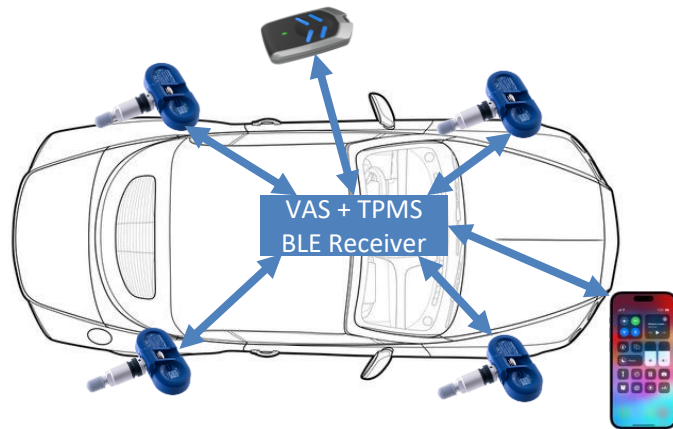
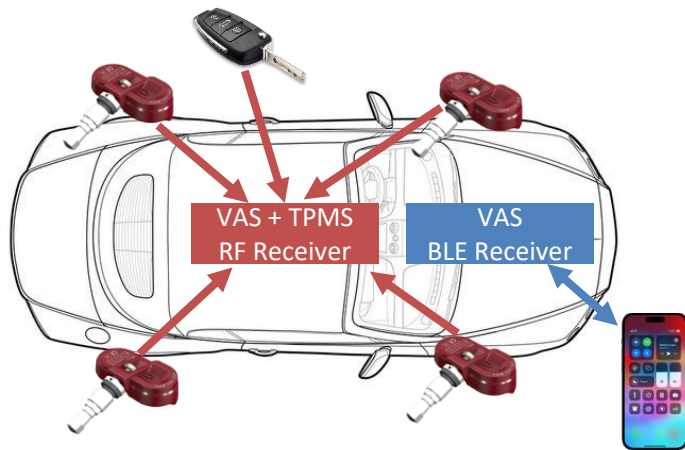
Automotive TPMS Market Size  
CAGR > 13%



Data Source: [www.mordorintelligence.com/industry-reports/automotive-tpms-market](https://www.mordorintelligence.com/industry-reports/automotive-tpms-market)

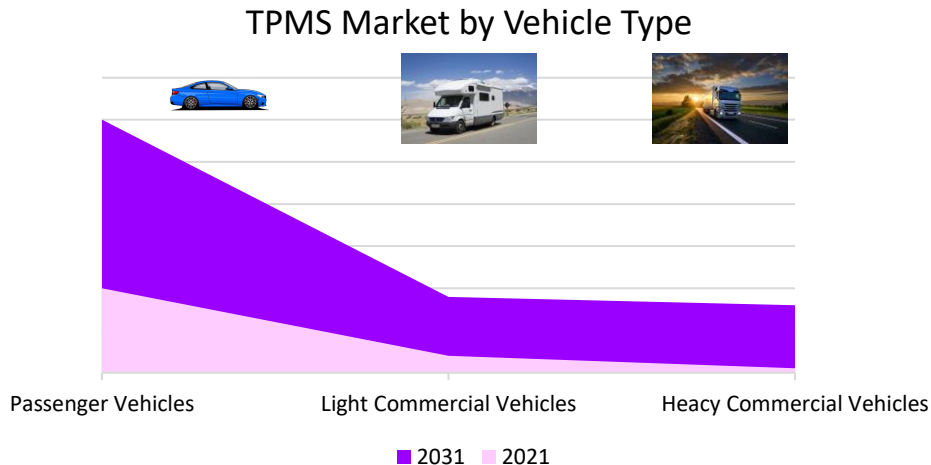
# 藍牙方案成為全球胎壓偵測器成長趨勢

- ◆ Market Preference on ADAS Plays a Significant Role in TPMS Growth.
- ◆ “Phone as A Key” Drives VAS (Vehicle Access System) from RF to BLE/UWB.
- ◆ Adopting BLE TPMS Helps Automakers to Eliminate the Dedicated RF Receiver.
- ◆ Technology Matures to Reach Good Performance/Price Ratio for Mass Adoption.



# 商用車胎壓偵測器成長機會

- ◆ TPMS Become a Compulsory Fitment for Commercial Vehicle across Europe:
  - on M1, M2, M3, N1, N2, N3, O3, and O4 vehicles (trucks, trailers, buses, coaches)
  - from 2022/7: new type approvals, and
  - from 2024/7: all new vehicles for registration.
- ◆ BLE TPMS Excellent for Commercial Vehicles and Fleets. Margin is Most Lucrative.
- ◆ A US Truck OE is evaluating BLE TPMS for their FCEV Truck.
- ◆ Top Tire Makers are adapting BLE TPMS as part of their Fleet Solution.



Data Source: <https://www.alliedmarketresearch.com/tire-pressure-monitoring-system-market-A07166>

# 系統電胎壓偵測器市場評價

- ◆ Ranked by Key Component Suppliers as WW #5.
- ◆ Recognized by WW Market Reports as One Global Key Player.

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## Key Players

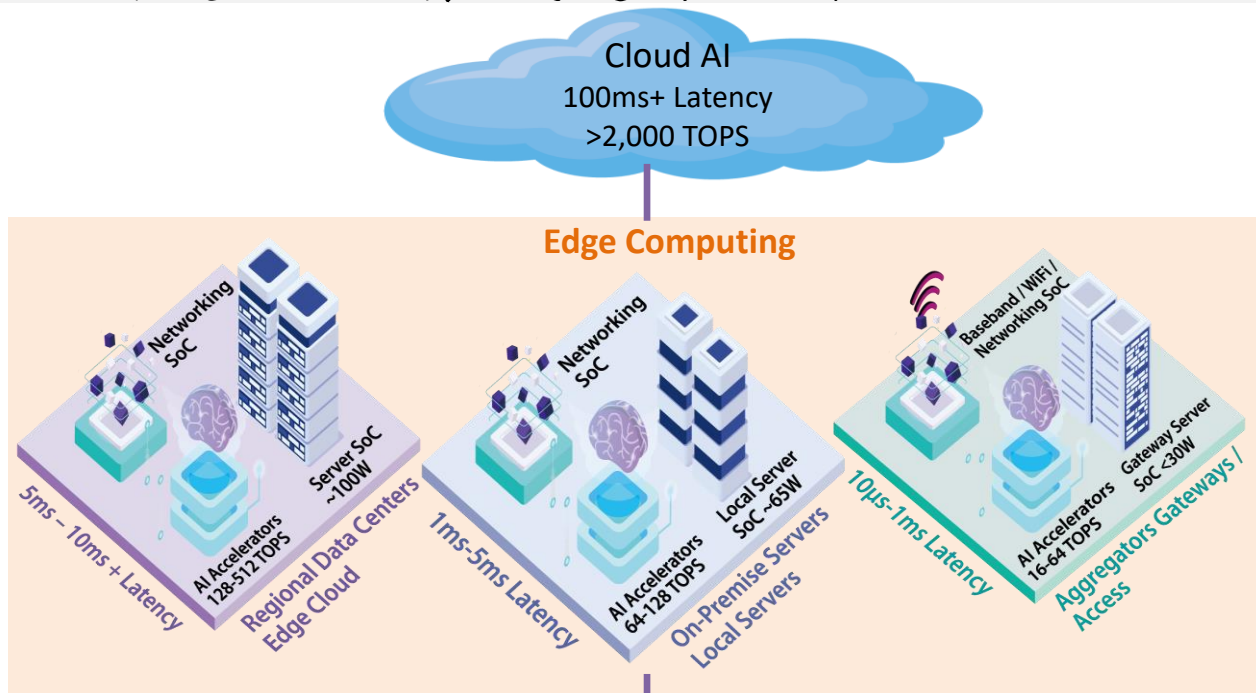
Schrader, Baolong, Pacific Industrial, Continental AG, Huf Group, TRW,  
**Sysgration**, Dias Automotive Electronic Systems, Sate, Steelmate and Other

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- ◆ Computing power demanded by AI gradually shifts from Cloud Servers to Edge Computing and Smart Devices (on-device AI).
- ◆ Markets for Edge Computing & Smart Devices are expected to experience significant growth and expansion.
- ◆ USA President Biden signed a \$1.2 trillion infrastructure investment and jobs act covering:
  - Environmental restoration and green infrastructure.
  - Transportation infrastructure and safety facilities.
  - Public utility infrastructure.
  - Electric vehicles and infrastructure.
- ◆ Growing demands for Smart Construction & Precision Agriculture accelerated the adoption of AI and IoT applications.



# AI新走向: 分散式邊緣運算



AMD MI325X 2,614 TOPS

NVIDIA H200 1,979 TOPS

NVIDIA Jetson AGX Orin 275 TOPS

Qualcomm QCS9100 100 TOPS



AMD Ryzen AI 9 365/370 50TOPS

Qualcomm X Elite 45 TOPS

NVIDIA Jetson Orin Nano 40 TOPS

Qualcomm QCS6490 13 TOPS



# AI伺服器與邊緣運算成長趨勢

Market	Server	PC	Laptop	Smartphone	Industrial PC
Current Value (2024)	USD 153.9 billion	USD 201.8 billion	USD 120.84 billion	USD 493.08 billion	USD 6.05 billion
Projected Growth (2030)	USD 200 billion	USD 300 billion	USD 179 billion	USD 735 billion	USD 9.94 billion
CAGR	11.40%	6.0% - 7.8%	6.0% - 7.3%	6.85%	7.30%
Impact of AI	Enhanced data processing, predictive maintenance, AI-driven analytics	Enhanced productivity, security, performance, and user experience	Enhanced productivity tools, customization, and security features	Enhanced user experience, smart assistants, AI-driven features	Smart manufacturing, predictive maintenance, real-time analytics
AI-Driven Market Value Projection (2030)	USD 230 billion	USD 350 billion	USD 200 billion	USD 790 billion	USD 15.8 billion
Sources	IDC, Expert Market Research, Technavio	IDC, Gartner, Future Market Insights	Canalys, Fortunly, Cognitive Market Research	IDC, Canalys, Market Data Forecast	Maximize Market Research, Future Market Insights



# AI增值應用場景垂直市場

## Rugged AIOV Computing & Control



## Rugged Handheld AIoT Device

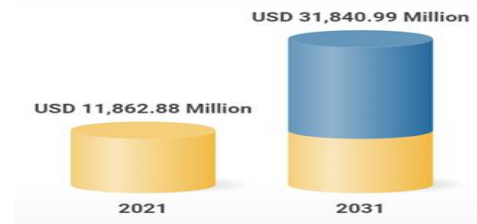


## Enterprise Wearable AIR Device



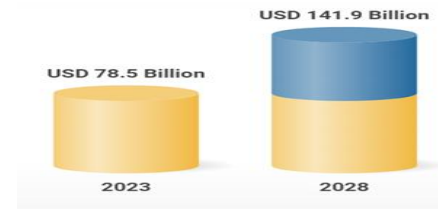
## Global Autonomous Construction Market

Market forecast to grow at a CAGR of **10.4%**



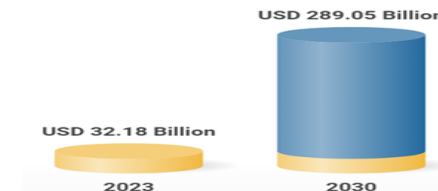
## Global Geospatial Analytics Market

Market forecast to grow at a CAGR of **12.6%**



## Global Augmented Reality Market

Market forecast to grow at a CAGR of **36.8%**



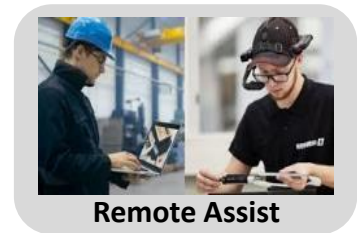
# 企業級穿戴式AI + AR設備



- Global No.1 Enterprise AR Head Mount Device/Smart Glasses.
- 41 of Fortune 100 Companies have deployed RealWear devices.



Telehealth



Remote Assist



Vision Picking



AR SOP

Design



Manufacturing



Distribution



Service



AI Integration



# 自主移動機器人成長趨勢

## ◆ Expected to see substantial growth over the next decade:

- Expert Market Research: \$3.96B in 2024 → \$9.47B by 2029, CAGR 18.5%.
- Coherent Insights: \$2.96B in 2023 → \$8.47B by 2030, CAGR 16.2%.

## ◆ Key Application Areas:

- Manufacturing (75% of AMR revenue in 2022, based on Grand View Research)
- Logistics.
- Warehouses.
- Fulfillment centers.





## Energy Storage Systems (ESS)



Energy Brick



ESS Battery Rack



Container ESS

Booming for AI Demands...

## Active Power



AI Data Center BBS/BBU



Volume Up from 2025



Telecom SMR Battery Rack

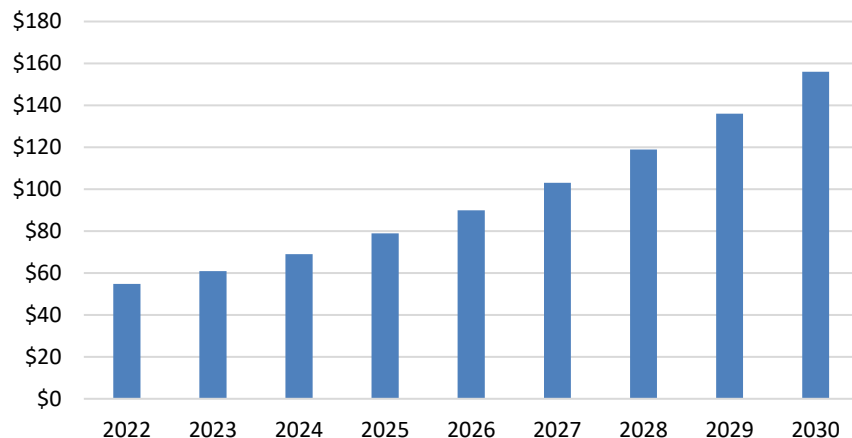


AC UPS Battery Rack



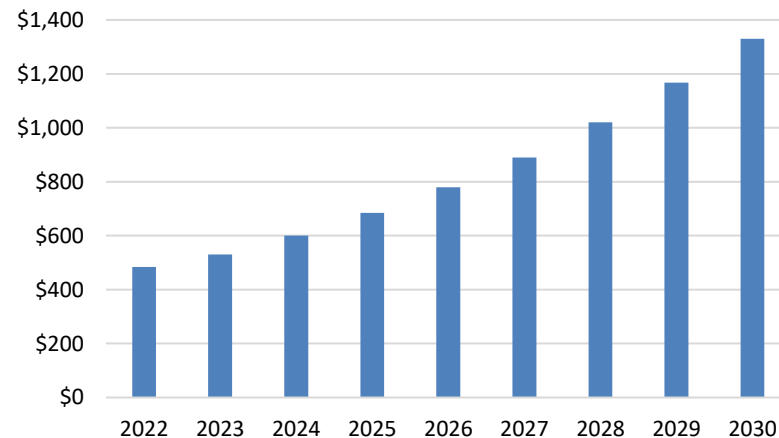
Global DC colocation market size was **US\$55B** in 2022, with **14.2%** CAGR from 2023~2030.

Global Data Center Market Size



Global cloud computing market size was **US\$484B** in 2022, with **14.1%** CAGR from 2023~2030.

Global Cloud Computing Market

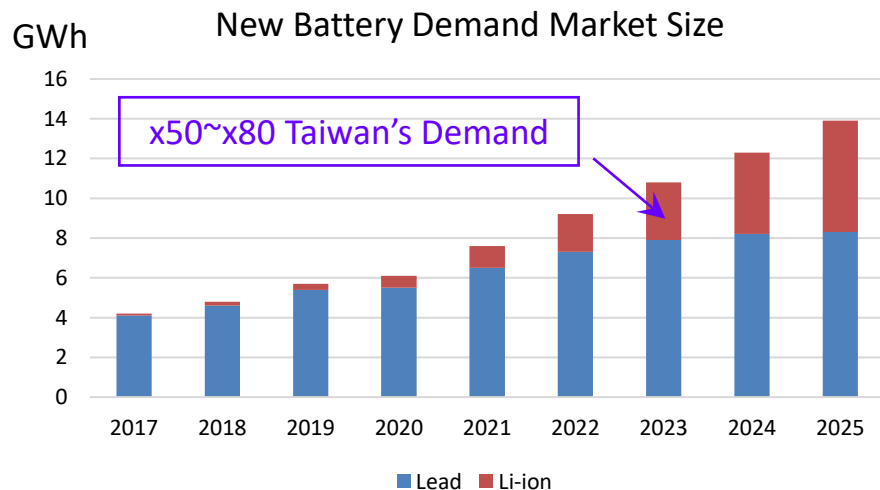


With 10% Lead-Acid to LIB Transformation Rate, around US\$700M LIB Business in 2022.

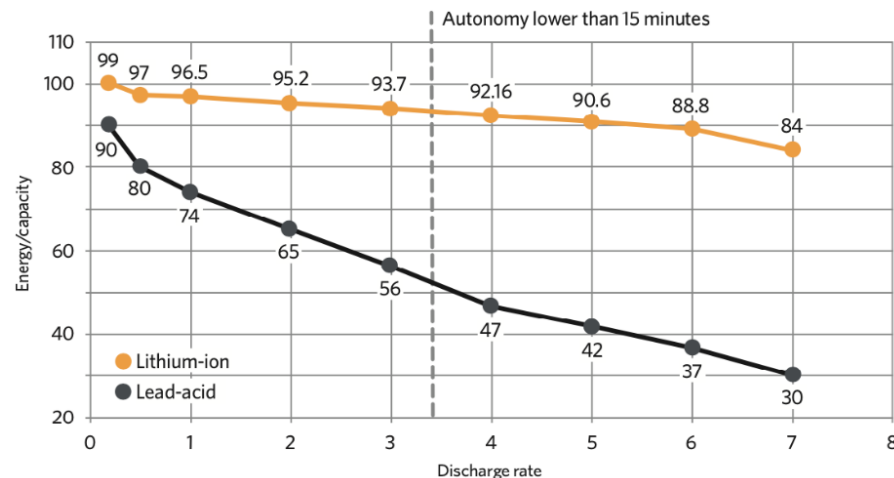
Source <http://www.grandviewresearch.com>

# 工業不斷電系統市場趨勢

**Annual Battery Demands in US/EU**  
**CAGR (2023~2025): Total 13.4%, LIB 38.9%**



## Telecom & Data Center Market



## Lead-Acid vs Li-Ion Battery Discharge Efficiency

<https://www.cibsejournal.com/technical/battery-technology-vrla-or-li-ion-batteries/>  
<https://www.datacenterknowledge.com/business/intel-make-altera-unit-standalone-business#close-modal>

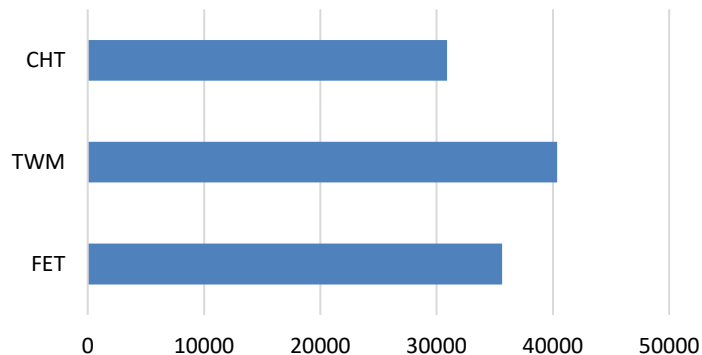


# 電信基地台SMR市場趨勢



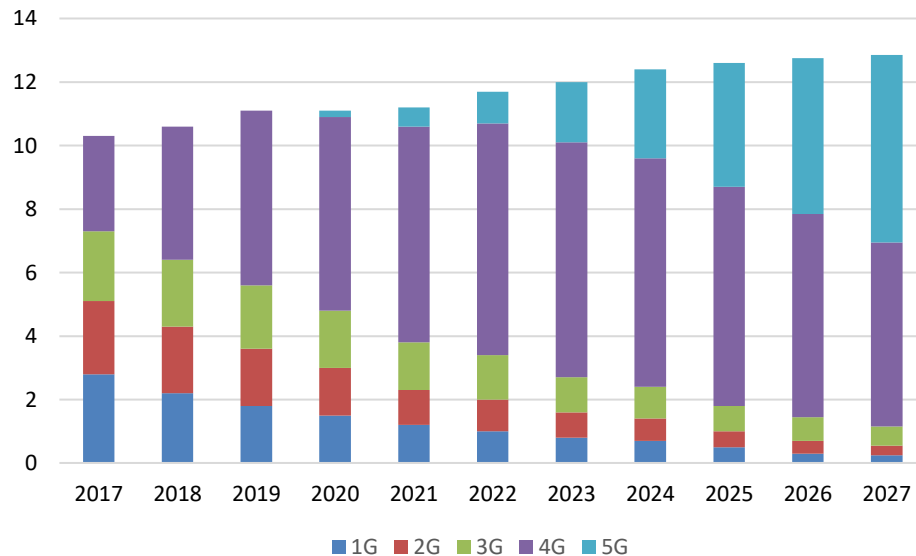
Li-Ion Battery Pack for Base Stations

# of Taiwan 4G Base Stations (2022/03)



- 100K+ Base Stations for Taiwan 4G Services
- In Average 270 People/Unit

Billions # of Worldwide Phone Users for Each Generation



30M+ Base Stations in 2023



## 美國設廠進展

# SYSGRATION

## Global Footprint

Headquarter with majority of R&D located in Taipei, Taiwan.

Multiple production bases including 2 located in China, 1 Taiwan, and 1 in US.

Each factory is fully equipped for full system production (from PCBA SMT/DIP to full unit Assembly/Test/Packing).

Flexible to allocate production resources to meet different logistic needs.



### Sysgration Headquarter

**Location:** Neihu, Taipei,  
Taiwan

**Sales, R&D, PM, SCM**



### Sysgration Nankang Factory (NKS)

**Location:** Nankang,  
Nantou, Taiwan

**TPMS, IPC, ESS**



### Sysgration US

**Location:** Texas, US

**PCBA, TPMS,  
IPC, AR, BBU/ESS**



High Speed SMT Line



Auto Insertion Line



Automatic Production Line



### Sysgration Huizhou Factory (HZS)

**Location:** Huizhou,  
Guangdong, China

**TPMS**



### Sysgration Zhenjiang Factory (ZJS)

**Location:** Zhenjiang,  
Jiangsu, China

**ESS, Li-Ion Battery Pack**

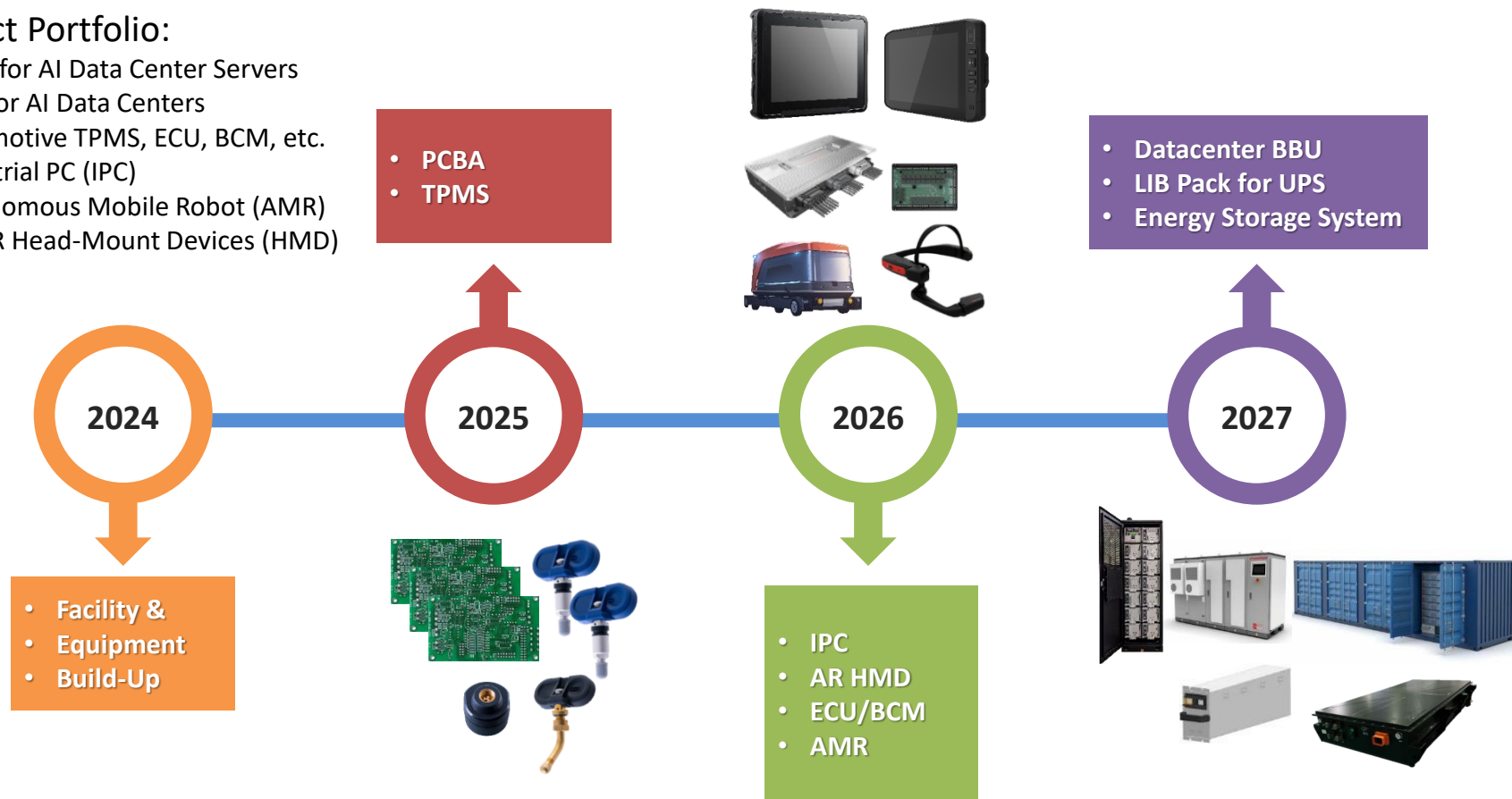


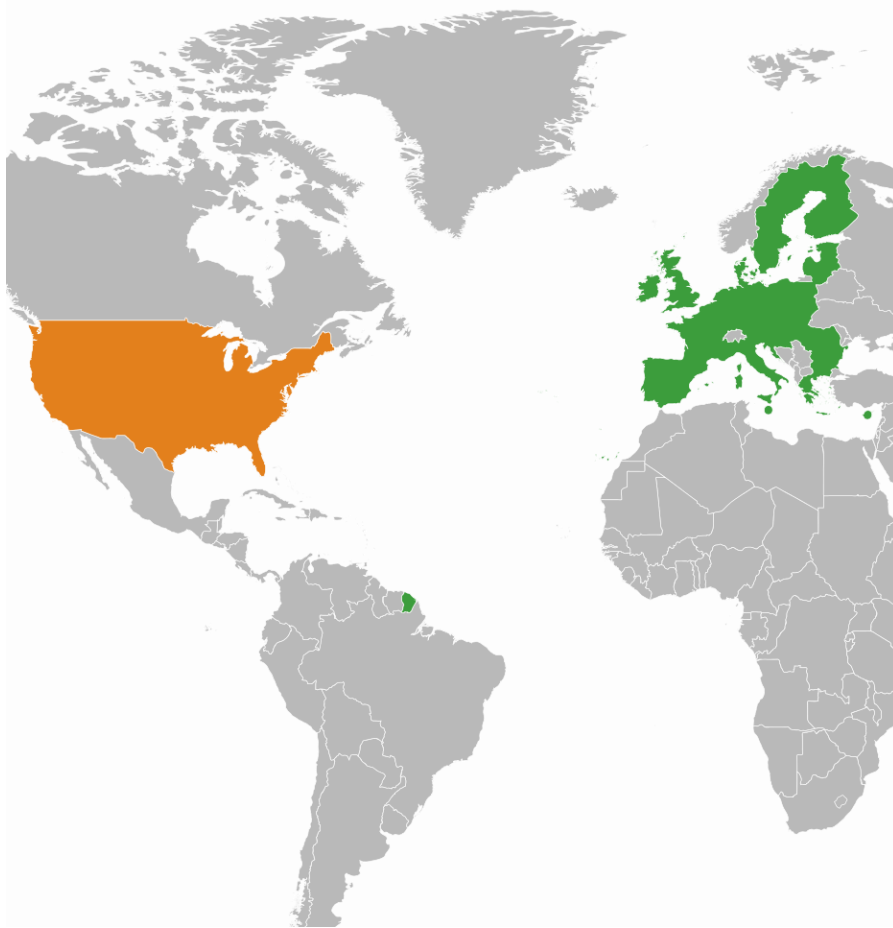


# 美國德州Plano廠時程及產品規劃

## ➤ Product Portfolio:

- ✓ PCBA for AI Data Center Servers
- ✓ BBU for AI Data Centers
- ✓ Automotive TPMS, ECU, BCM, etc.
- ✓ Industrial PC (IPC)
- ✓ Autonomous Mobile Robot (AMR)
- ✓ AR/VR Head-Mount Devices (HMD)







## ESG永續經營



# 榮獲Asia Sustainability Reporting Awards 四項提名



Taiwan Finalists	Capital (NT\$ B)	Report (Large Company)	First Time	Governance	CEO Letter	Human Right	SDG	Materialty	Stakeholder	Climate	Environment Impact	Workplace	Diversity	Supply Chain	Community Impact	Items of Finalists	Award Winner
Innolux	90.8				Gold	Silver	V	V	V		V	Bronze	V	V	V	10	3
E Ink	11.4	Gold		Gold				Gold	Bronze		V			Gold	Gold	7	6
Sinyi Realty	7.4			Silver	V		Silver		Silver				V	V		6	3
Asustek	7.4	V						V		V	V			V		5	0
Taishin Financial Holding	13.5	Silver						Silver	Gold			V		V		5	3
Sysgration	1.8				V		Bronze			V		V				4	1
Cathay Financial	162.0	V						V				V	V			4	0
AUO	77.0					Gold				V	V			Bronze		4	2
Cathay Century Insurance	3.3						V		V	V						3	0
Hon Hai	138.6	V												V		2	0
Cathay Securities	7.7		Bronze						V							2	1
Cathay Life Insurance	63.5									Gold						1	1

<https://www.csrworks.com/asra/winners-2023/>





BRONZE

## Asia Sustainability Reporting Awards 2023

Asia's Best SDG Reporting



# 榮獲天下雜誌TRIPs企業減碳溫度計1.5°C標章

**TRIPs**  
企業減碳溫度計

Methodology | CW Sustainability

## Taiwanese corporations' Ambition of Carbon Reduction

How ambitious Taiwanese corporations are regarding carbon reduction? According to the TRIPs, more than 100 corporations in Taiwan have made a clear commitment to net-zero emissions or carbon neutrality by joining the Science-Based Target Reduction Initiative (SBTi), the Renewable Energy 100 percent (RE100) organization, or by announcing it in the "Excellence in Corporate Social Responsibility Award" or on public occasions. According to the information actively provided and passively disclosed, the current percentage of corporate ranked "Excellent" and "Good" is over 35%.

 **<1.6°C**  
**EXCELLENT**

**22.8%**

TCFHC

CHUNG HUNG

UFI

220 corporations in total

 **1.6°C to 2.1°C**  
**GOOD**

**7.0%**

eMemory

WTC

SYSTEX

68 corporations in total

 **2.1°C to 3.0°C**  
**AVERAGE**

**10.0%**

Senao Networks

FBT

Coretronic

97 corporations in total

 **3.0°C to 4.0°C**  
**FAIR**

**53.3%**

TFC

Chief

Etron

515 corporations in total

 **>4.0°C**  
**POOR**

**6.9%**

GREATWALL

TPT

GENIIDEAS

67 corporations in total

天下雜誌 TRIPs

**1.5°C 標章證書**

Certification in Net-Zero Progress under Paris Agreement

茲證明 **系統電子工業股份有限公司**

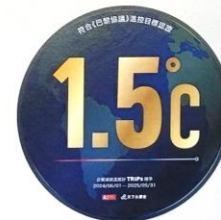
所制定之減碳目標與路徑，經「企業減碳溫度計」(TRIPs)認定，符合《巴黎協議》於本世紀末地球升溫不超過 1.5°C 之企圖心，特此授予標章以茲認證，併期待 貴企業依承諾，持續朝向淨零排放/碳中和邁進。

貴企業於「企業減碳溫度計」(TRIPs) 的溫度判定為 **1.484 °C**

此溫度判定依據為：

☐ 科學基礎減量目標倡議組織 (SBTi) 審核通過。

☒ 「企業減碳溫度計」(TRIPs) 依據貴企業/組織之減碳路徑經 AGTP 氣候模型與參數矩陣計算後得出。



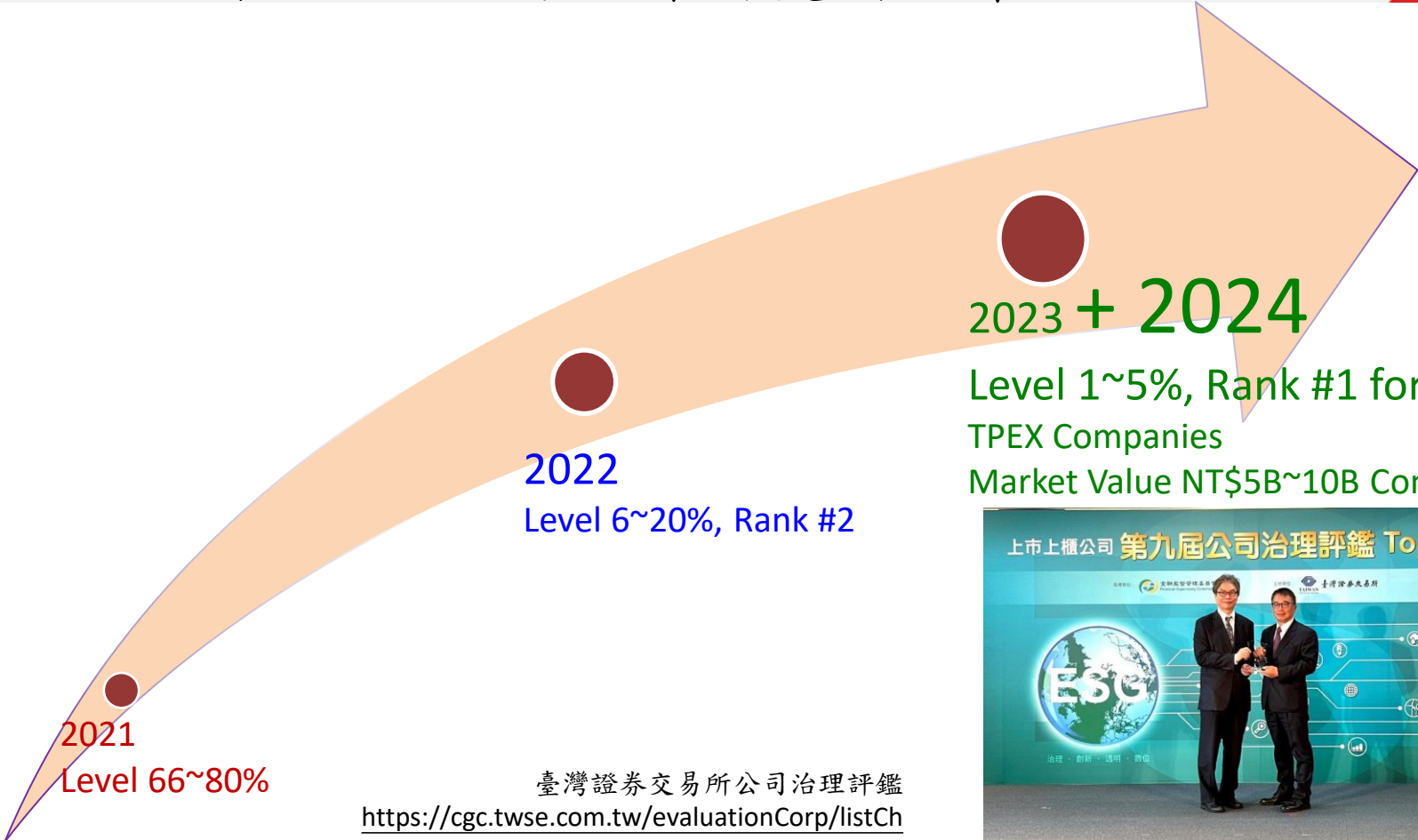
天下雜誌 共同執行長

吳琬瑜 黃雲



證書有效期間 2024年6月1日 — 2025年5月31日

# 公司治理評鑑: 2024再度蟬聯雙料冠軍



臺灣證券交易所公司治理評鑑  
<https://cgc.twse.com.tw/evaluationCorp/listCh>





## 提問討論



Thank You