

LAYNITRIDE

**Investor Conference** 

May 29, 2025



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# **Outline**

I. Company Overview

IV. Business Strategy and Deployment

**II.** Product Applications

V. Financial Performance

**III.** New Technology Development

VI. Prospect & Planning

# Company Overview



PlayNitride is a Taiwan-based company specializing in nitride semiconductor materials and applications. It was the first company listed on Taiwan's Innovation Board.

The company's main products are CoC (chip-on-carrier) and MicroLED displays. CoC technology is to integrate MicroLED chips onto carrier and used in various mass transfer technologies, enabling frameless large TVs, transparent car displays, high-brightness wearables, and flexible MicroLED screens.

Founded 2014/02/25

IPO 2022/08/18

Market Cap NT\$15 billion

Domestic Locations Miaoli-Zhunan (Headquarters), Tainan, New Taipei

Overseas Location USA - San Jose

Employee count 500+





# 2025Q1 Fundraising Completed

Total Fundraising: NT\$2.774 Billion

#### CB

- NT\$100,000 per bond, 8,000 bonds issued → NT\$800 million raised
- Conversion price: NT\$248.3 per share,
   3-year term
- Listed on: February 27

#### SPC

- Subscription price: NT\$188 per share, 10,500,000 shares issued → NT\$1.974 billion raised
- Listed on: March 27





#### **Main Shareholders**



- SVIC
- JKL
- EPISTAR
- Konly Venture Corporation (AUO Group)
- LITEON Technology
- Mr. Hsueh-Jen Sung
- Chairman Charles Li



# **Capital Utilization**

#### Capital Expenditure

- Address production line equipment shortages, expanding capacity from 2,000+ to over 3,000 wafers
- Invest in advanced R&D platforms for nextgeneration products:
  - 8"/12" Epi, COW, and CoC process equipment
  - Equipment for improved alignment precision, etching, and thin-film related key process steps

#### Working Capital Enhancement

- Support company's revenue growth and increase material inventory
  - Spare parts/CoC process material inventory
- Overseas expansion and deployment



# Overseas Companies (Multiple Production Sites) – Motivation for Establishment

#### Geopolitical / Tariff-related Factors...

- Established in May 2023: PlayNitride U.S. subsidiary
- Ongoing expansion of U.S. subsidiary operations

#### ICFC=In China, for China

- China is an important market
- China ranks No. 1 globally in LCD production
- Chinese OLED manufacturers now account for nearly 50% of market share
- Plan to establish a subsidiary in Mainland China in 2025.



# Impact of New Tariffs

### Limited Impact from Tariffs

PlayNitride's direct sales revenue from the U.S. market accounts for less than 3%, so the impact on company operations is minimal.

## **Customer Communication**

Proactively engaging customers to address impacts and align on solutions. No tariff-related order cancellations to date.

# **Enhancing Competitiveness**

Cost control & supply chain optimization to ensure the competitiveness of PlayNitride's products.

# Closely Monitoring and Responding to Changes

Continuously monitoring market developments and responding proactively.

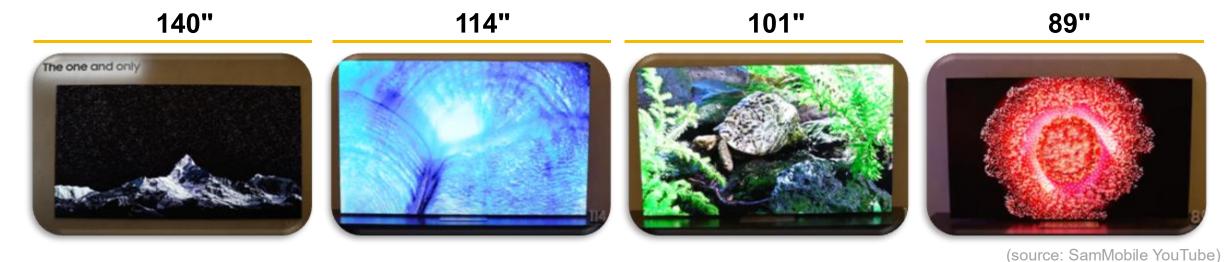
# Product Applications

# Samsung Electronics unveiled its newest MicroLED TV Lineup in CES 2024.

The 2024 MicroLED lineup offers new models ranging from 50 to 140-inches (50, 63, 76, 89, 101, 114 and 140-inches) to provide consumers with a breadth of options for unparalleled picture quality and screen experience. Thanks to its modular nature, MicroLED is not bound by shape, ratio and size, making it completely customizable to fit a consumer's desired set up. In addition, it comes without bezels, so regardless of configuration, the boundary between screen and real life is seamless.



76"





Samsung **Transparent MicroLED Display** 



(source: TechNews website)







30-inch	
Micro LED	
960x540	
0.69mm	
600cd/m <sup>2</sup>	
RGB/flip chip	
	Micro LED 960x540 0.69mm 600cd/m²



Size	17.3-inch
Tech	Micro LED
Resolution	1280x720
Pixel pitch	0.3mm
Brightness	>1,200cd/m <sup>2</sup>
Touch	TP cell = 0.5mm, 5 points



Size	13.5-inch
Tech	Micro LED
Resolution	1920x1080
Pixel pitch	<0.3um
Brightness	5,000cd/m <sup>2</sup>
Pixel density	163 PPI

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**AUO Transparent MicroLED Display** 

(source: Omdia Report)





Interactive Transparent Window 2024 CES Innovation Award



Rollable Rear Seat Entertainment 2024 CES Innovation Award

**AUO Automotive MicroLED Display** 

(Source: AUO Website)



Continental creates world's first see-through car display in Swarovski crystal

2024 CES Innovation Award

# The outstanding performance of MicroLED displays at CES 2024



FORVIA's Skyline Immersive Display 2024 CES Innovation Award



• 9.6" Micro LED

• 229 PPI (1920x1080)

• 1,000 nits



**CarUX Automotive MicroLED Display** 

(source: CarUX Website)

2023 SID

Best MicroLED-based Technology





**166" 5K P0.833 Waterfall Display** (Seamless tiling by 324 modules)

# Large-sized MicroLED Display (Modular PCB)



89" 5K 32:9 P0.43 Curved Monitor (Seamless tiling by 168 modules)



# Wearable MicroLED Display



1.39" 338ppi MicroLED Circular Display

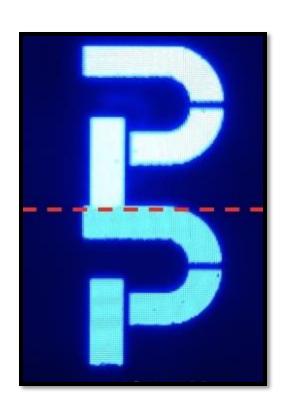


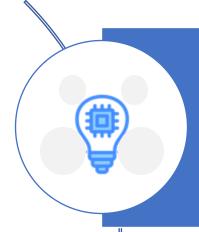


# **New Technology Development**



## To compete with OLED technology— High Voltage low current Tantium™ chip design





#### Novel type of MicroLED design

- Revolutionary product
- Cd/A increase 80%-100%
- Power saving ~40%



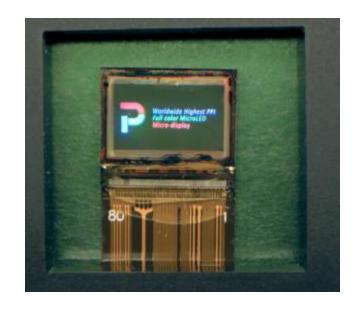
Outperform OLED on Power consumption and lifetime "without any change of panel design."



# MicroLED Is the Key for **AR Glasses**

#### 0.49" MicroLED μ-display

- 1920\*1080 (FHD)
- 4536PPI
- Full Color
- >4,000,000 MicroLED 2.5µm chips



2023 SID



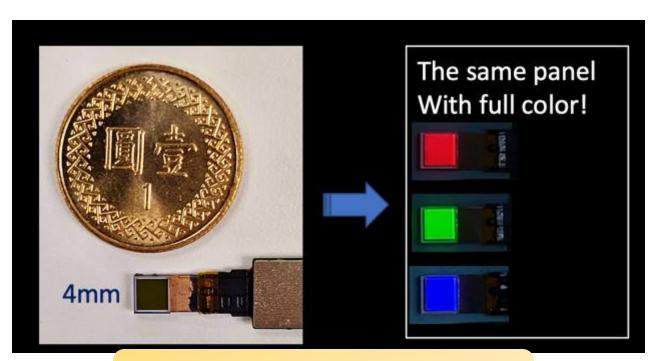


## The First Priority Is Being Stylish and Lightweight!





# Monolithic Full-Color MicroLED Microdisplay for Al Glasses Applications



2025 Touch TW GPA

Coutstanding Technology Award

#### **5,644 PPI Full-Color MicroLED Microdisplay**

#### **Technical Highlights:**

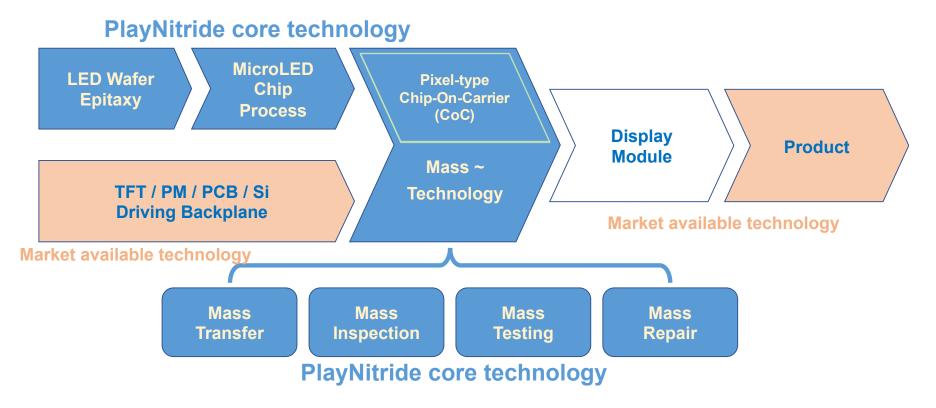
- A newly designed CMOS backplane specifically developed for MicroLED
- Ultra-small size: 0.18 inch
- High resolution: 720 × 720
- Industry-leading pixel density: 5,644 PPI
- Ultra-high brightness: > 500,000 nits (white)
- Wide color gamut: > 90% DCI-P3



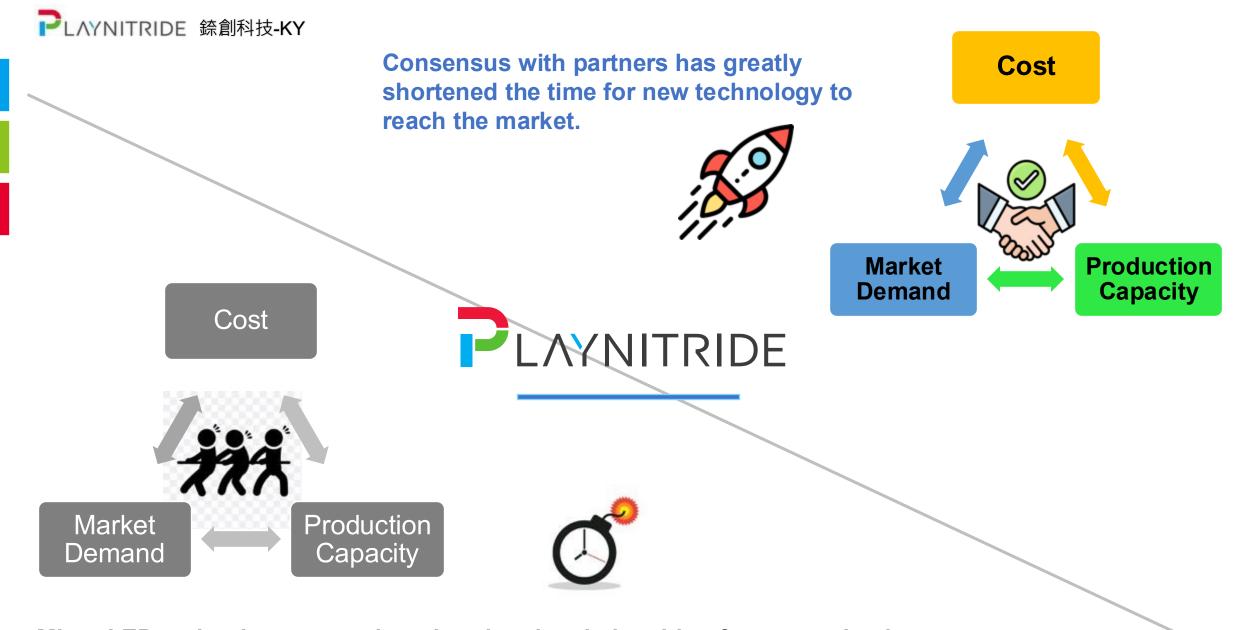
# **Business Strategy and Deployment**



# We Facilitate The MicroLED Ecosystem



- PlayNitride is one of the few companies that owns and integrates the key technologies of MicroLED displays.
   We've completed technical know-how to quickly optimize production and solve new technical challenges.
- In each technical link, PlayNitride has a strong team to innovate and develop our proprietary technology.
- PlayNitride is in a leading position in the market,, while also extensively building its patent portfolio and establishing know-how.



Micro LED technology enters into the triangle relationship of cost, production capacity and market demand.

Slow progress could shift the market toward competing technologies like OLED."



#### Mass Transfer Equipment Development/Sales

#### **Turnkey Solution Construction Services**

#### **Technical Services**

- Automotive Display POC
- AR/VR Display Co-development
- Transparent Display Co-development
- PCB-based Indoor Signage Co-development

#### CoC

Over 90% market share, the only company in the world certified by the largest manufacturer of consumer electronics in Korea







**Business Deployment** 

# Financial Performance



## Revenue and EPS

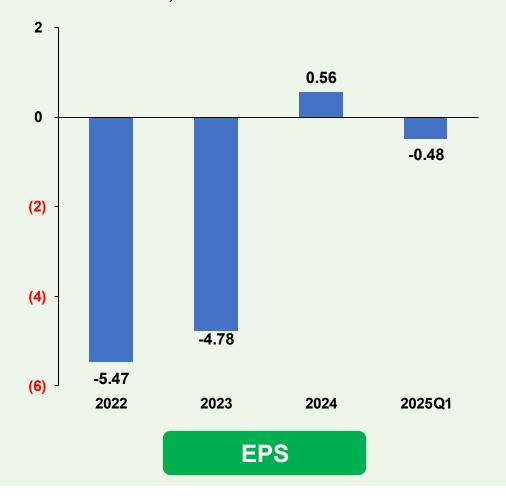
Revenue shows steady annual growth



Monthly Revenue (Cumulative Total)

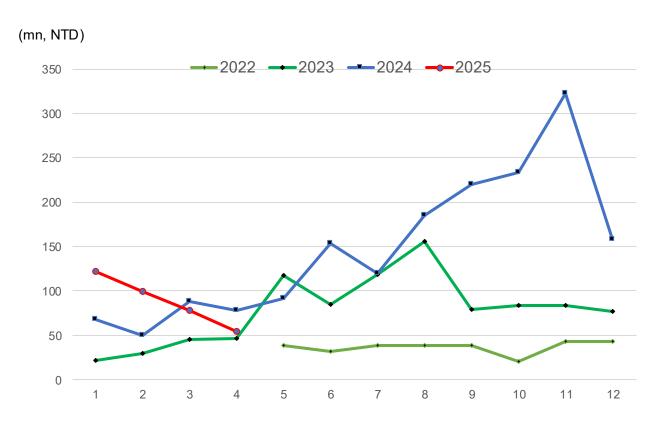
- ✓ Revenue this quarter increased slightly compared to the same period last year.
- ✓ In Q1, the handling of CB/SPO underwriting fees impacted EPS.

[Note] Non-operating income : 2022 NTD 206 million, 2023 NTD 49.4 million, 2024 49.5 NTD million





# Monthly revenue

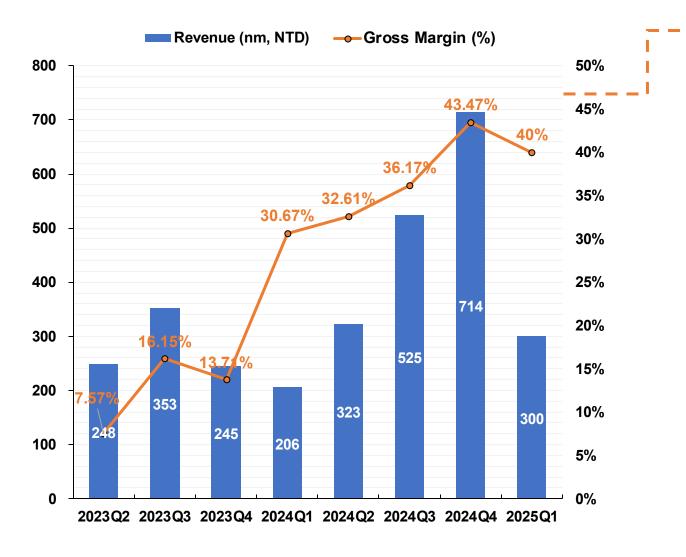


# Revenue Decline in March & April

- ✓ COC customer demand was lower than forecast (Q1 and Q2 2025)
- ✓ Mostly postpone their demand or shift to new model, not cancel order.



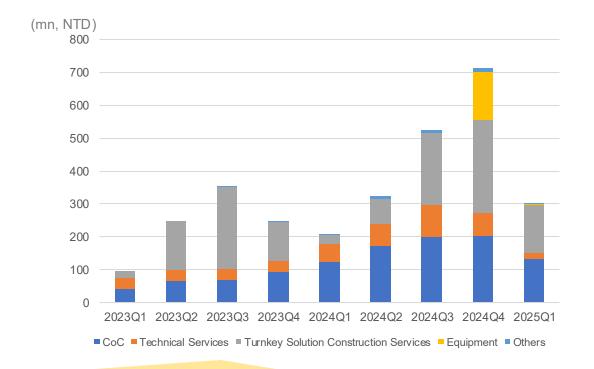
# **Gross Margin**

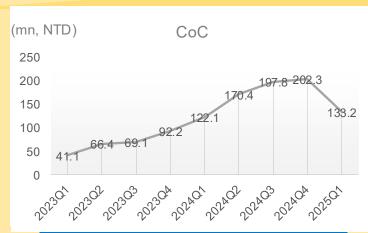


# Maintained product gross margin



## Revenue Breakdown

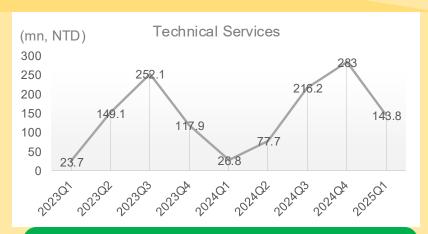




New chip design introduced for new product models.



Some technical service projects are entering the final stage, while new projects are being developed.



It is recognized using the percentage-ofcompletion method, resulting in greater fluctuations.

# Prospect & Planning



• Add New Business Item In addition to CoC, Turnkey Solution, and NRE, the sales of transfer equipment is to be added.

Diversify Customer Contributions Expanded sales team and U.S. subsidiary starts operation to develop and serve European/American/Asian markets. • Global Expansion In response to customer demands and geopolitical considerations, we are expanding overseas manufacturing and operational sites.

Continuous Investment in R&Ds Master the research and development of nextgeneration process technology and equipment, maintain a leading position, and accumulate future potentials.

"Ride the Wave of MicroLED, Leverage the Display Industry"



,將自2025年1月6日起,取消合格投資人限制,讓更多 投資人能夠參與創新企業的投資。(圖/資料照)

證券交易所日前宣布,將自2025年1月6日起全面取消創新板合格投資人限制,這項舉措將 大幅擴大投資人範圍,預計創新板的投資人口將從現有的30萬戶增至1300萬戶。這一改革 不僅使更多台灣民眾能夠參與創新企業的投資,還將提升創新板市場的流動性,改變台灣 資本市場的格局。

Source form: 2024/12/17 tw.news.yahoo.com

#### **Breaking Tradition! Innovation Board to Fully Open in January** Next Year — 13 Million Shareholders to Benefit

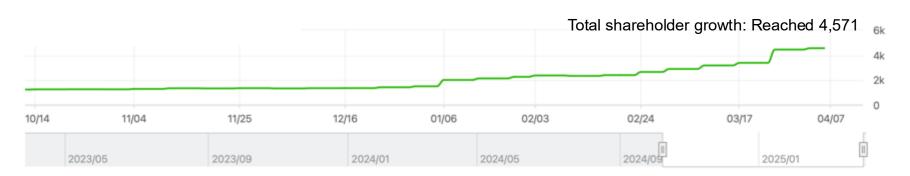
Starting January 6, 2025, the restriction on qualified investors will be lifted, allowing more investors to participate in investments in innovative companies.



#### **Innovation Board 2.0 Launched**

#### Steady growth in number of shareholders:

- Before listing: 228 shareholders
- From Innovation Board listing (Aug 2022 ~ End of 2024): approx.
   1,400 shareholders
- After new Innovation Board system launched ~ just 4 months:
  - → Number of shareholders doubled to 4,500









## PlayNitride Included in MSCI Index (2025/02/12)

- MSCI (Morgan Stanley Capital International) announced its quarterly index adjustment results on February 12. Ten new companies were added to the MSCI Global Small Cap Index, while 41 companies were removed. The adjustment is scheduled to take effect after market close on the February 27th. •
- MSCI Global Small Cap Index
  - Ten Taiwanese companies were newly added to the MSCI Global Small Cap Index, including: PlayNitride-KY (6854), StarLux Airlines (2646), Tigerair Taiwan (6757), Nanya Technology (2408), Walsin(1605), Want Want (6187), Caliway (6919), ITH-KY (6962), Posiflex technology(8114), and SPG-KY(6768)

