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***PHISON***

# Financial Results & Company Outlook

## 2023 Fourth Quarter

K.S. Pua | CEO of Phison

March 8, 2024

# Forward-Looking Statement

Information included in this earning meeting that are not historical in nature are "forward looking statements". Phison cautions readers that forward looking statements are based on Phison's reasonable knowledge and current expectations and are subject to various risks and uncertainties. Actual results may differ materially from those contained in such forward looking statements for a variety of reasons including without limitation, risks associated with demand and supply change, manufacturing and supply capacity, design win, time to market, market competition, industrial cyclicity, customer's financial condition, exchange rate fluctuation, legal actions, amendments of the laws and regulations, global economy change, natural disasters, and other unexpected events which may disrupt Phison's business and operations. Accordingly, readers should not place reliance on any forward-looking statements. Except as required by law, Phison undertakes no obligation to update any forward-looking statement, whether as a result of new information, future events, or otherwise.



# Executive Summary

- 1** Phison's Business Transformation
- 2** Financial Results
- 3** Business Highlights
- 4** Technology Leadership Update
- 5** Q&A

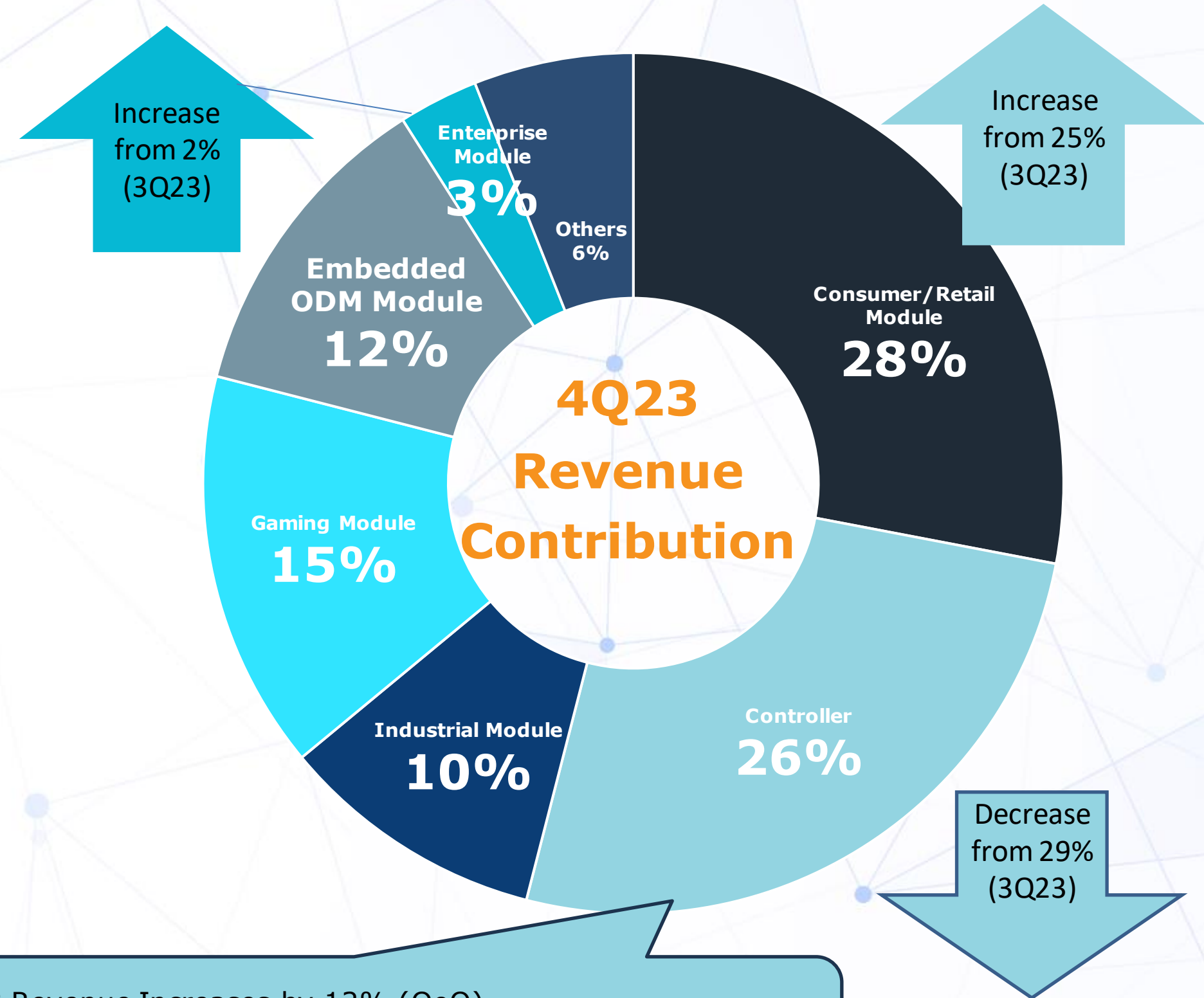
# **1** Phison's Business Transformation



# Phison's Non-consumer Deployment Reduces NAND Market Fluctuation Impact

Revenue from Non-consumer/retail Products

70%+



NAND Controller 4Q23 Revenue Increases by 12% (QoQ)  
However, due to a higher growth rate in revenue from NAND module solutions, the contribution of NAND controller revenue decreased compared to 3Q23.

Note: Controller Revenue Contribution includes both direct shipments and controllers applied to modules.

# **2 4Q23 Financial Results**



# 4Q23 Revenue and Gross Profit

**4Q23 Revenue**

**\$15.748B**

Revenue up 28.1% YoY  
Revenue up 27.1% QoQ

**4Q23 Gross Profit**

**\$5.673B**

Gross profit up 64.5% YoY  
Gross profit up 42.2% QoQ  
All-time high

Revenue in \$NT



# 2023 full-year Revenue and Gross Profit

**Revenue**

**\$48.222B**

Revenue down 20% YoY

**Gross Profit**

**\$16.141B**

Gross profit down 7.1% YoY  
3<sup>rd</sup> high in history record

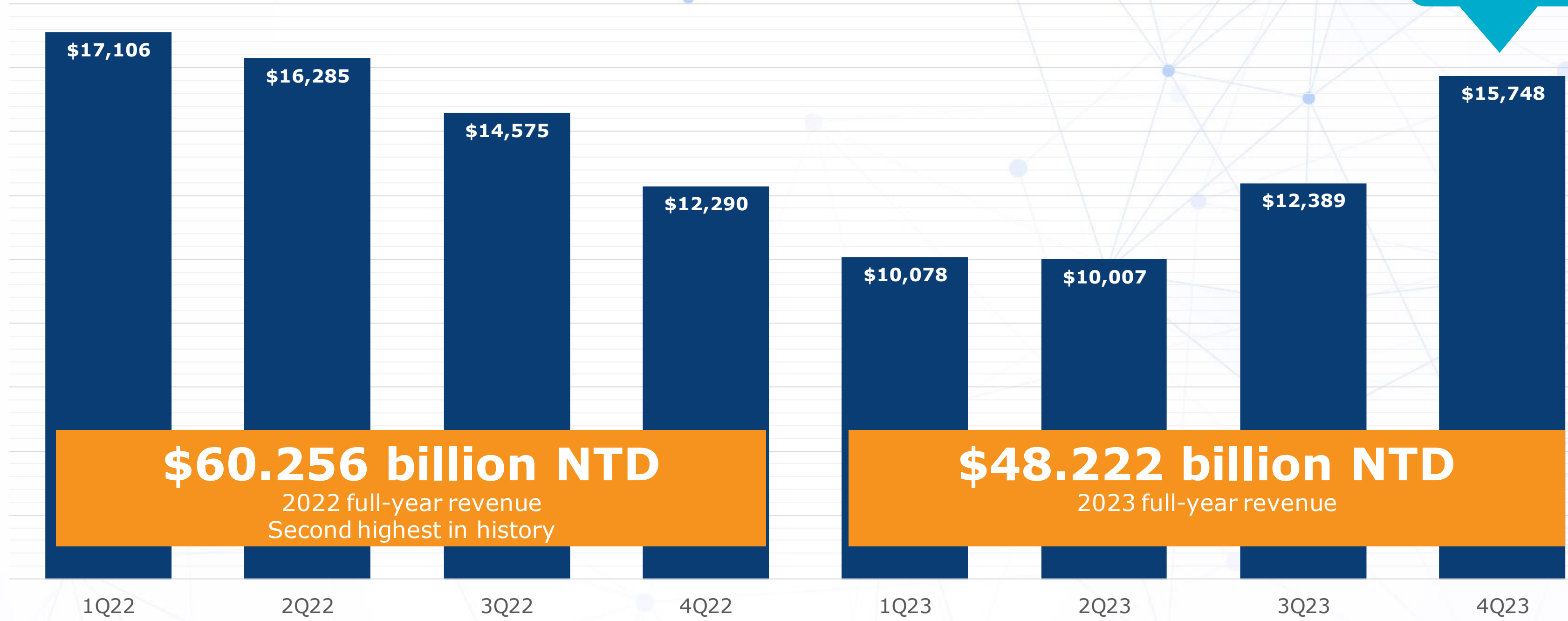
Revenue in \$NT



# Revenue Trend

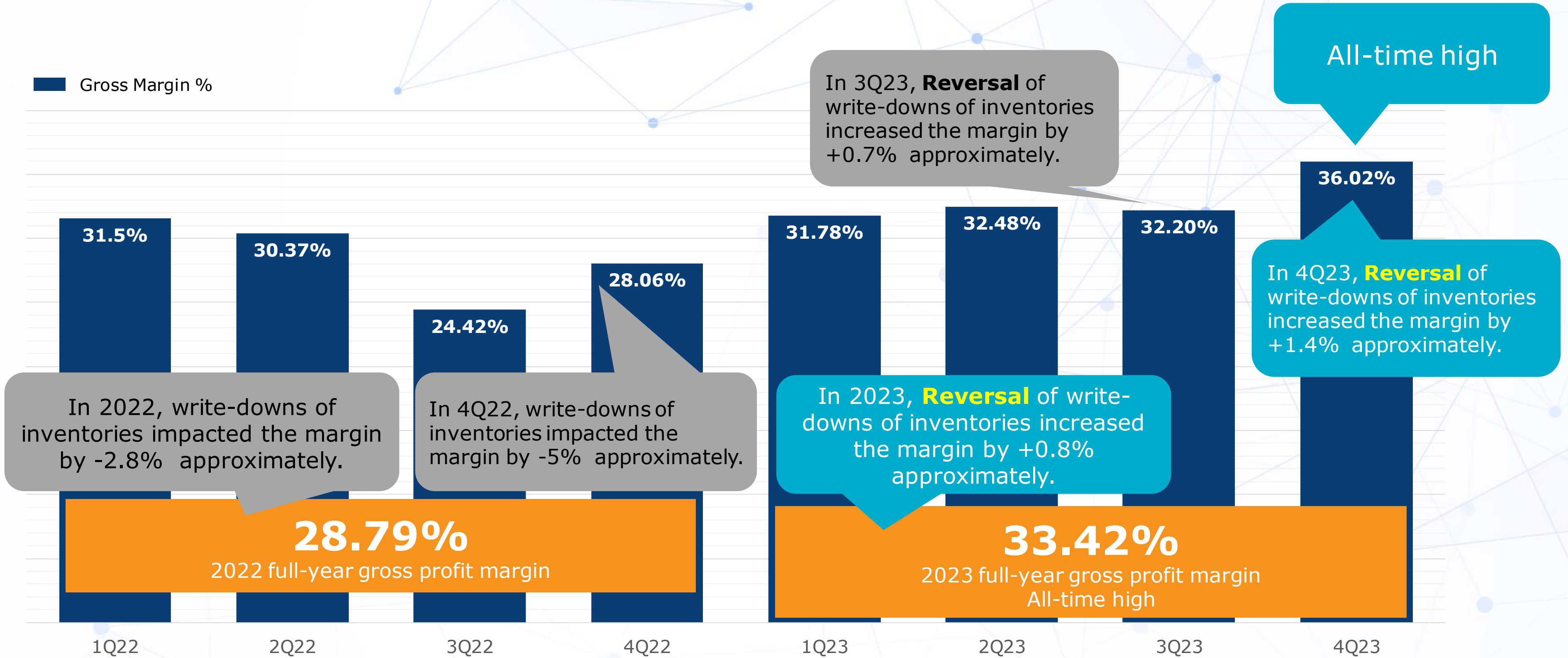
■ Revenue NT\$ millions

Second high in same period





# Gross Margin Rate Trend



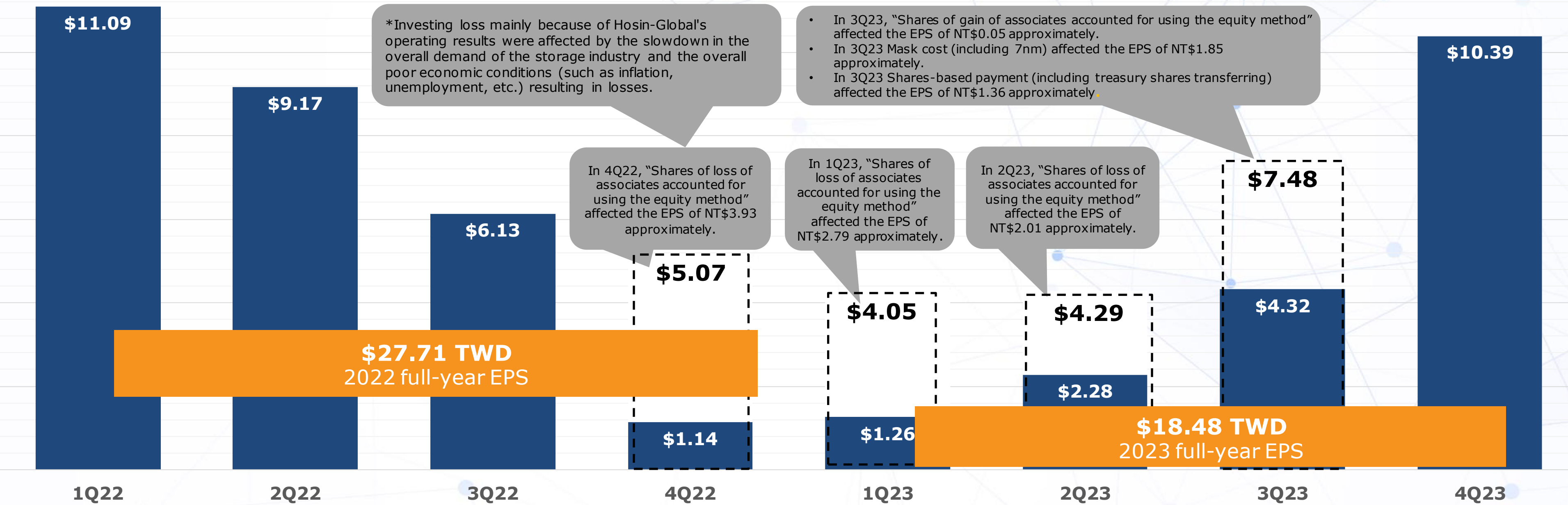
**Note:** By the accounting rule, we evaluate the lower of cost and the market price (LCM) to reserve the allowance of inventory price loss. When the market price hiking, we will reversal the allowance of inventory price loss.



# Earnings Per Share Trend

The associates accounted for using the equity method-HSG turns to be profitable for 2023 full-year.

In \$NT



\*Basic EPS contribution from one-time gain was in light blue.



# 4Q23 Income Statement Highlights

Taiwan-International Financial Reporting Standards (TIFRS)

All-time high  
The 3rd high in a single quarter

- 1 Revenue in NTD: QoQ is increased 27.1%. Revenue in USD: QoQ is increased 25.4%.
- 2 In 4Q23, The margin was 36.02%(record high of a single quarter). The reversal of allowance for inventory LCM affected the margin by +1.4% approximately.
- 3 4Q23 OPEX was higher than 3Q23. Due to mask cost (NT\$0.2bn), and higher employee compensation reserved base on higher profit before taxes. Phison keeps investing in research and development to maintain technological leadership.
- 4 The non-operating gains in 4Q23 mainly for recognizing the gains of investments for using the equity, the losses of forex and the gains from finance assets valuations.

NT\$m	4Q23	3Q23	4Q22	Q/Q (%)	Y/Y (%)
<b>Revenue in US\$Mn</b>	<b>493</b>	<b>393</b>	<b>392</b>	25.4	25.8
<b>Revenue</b>	<b>15,748</b>	<b>12,389</b>	<b>12,290</b>	27.1	28.1
<b>Gross Profit</b>	<b>5,673</b>	<b>3,989</b>	<b>3,449</b>	42.2	64.5
<b>Marketing Exp.</b>	391	325	334		
<b>General &amp; Adm. Exp.</b>	355	238	204		
<b>Research &amp; Development</b>	3,426	2,896	1,644		
<b>Expected credit losses</b>	(40)	5	24		
<b>Operating Expenses</b>	4,132	3,464	2,205	19.3	87.4
<b>Operating Profit</b>	<b>1,541</b>	<b>525</b>	<b>1,243</b>	193.5	24.0
<b>Non-Operating gains (losses)</b>	642	427	(1,082)		
<b>Pretax Income</b>	2,183	952	161	129.3	1255.9
<b>Tax Expenses</b>	99	94	(56)		
<b>Net Income to Phison</b>	<b>2,084</b>	<b>858</b>	<b>217</b>	142.9	860.4
<b>Basic EPS (NT\$)</b>	<b>10.39</b>	<b>4.32</b>	<b>1.14</b>		
<b>Key Financial Ratios (%)</b>					
<b>Gross Margin</b>	36.0%	32.2%	28.1%		
<b>Operating Margin</b>	9.8%	4.2%	10.1%		
<b>Net Profit Margin</b>	13.2%	6.9%	1.8%		
<b>Average Exchange Rate--USD/NTD</b>	31.15	30.93	29.80		

\*EBITDA which takes earnings and adds back interests, taxes, and depreciation/amortization charges.

# FY23 Income Statement Highlights

Taiwan-International Financial Reporting Standards (TIFRS)

Historical High  
for the same period

- 1 2023 full-year:  
Revenue in NTD: YoY is decreased (20%).  
Revenue in USD: YoY is decreased (24.4%).
- 2 2023 full-year:  
The margin was 33.42% (record high in the same period). The reversal of allowance for inventory LCM increased the margin by 0.8% approximately.
- 3 2023 full-year:  
OPEX was higher than year-ago. Due to higher mask cost, treasury shares transferring and employee compensation reserved. Phison keeps investing in research and development to maintain technological leadership.
- 4 2023 full-year:  
The non-operating losses mainly for recognizing the losses of investments for using the equity, the gains from finance assets valuations and the forex.

NT\$m	2023	2022	Y/Y (%)
<b>Revenue in US \$Mn</b>	<b>1,545</b>	<b>2,043</b>	(24.4)
<b>Revenue</b>	<b>48,222</b>	<b>60,256</b>	(20.0)
<b>Gross Profit</b>	<b>16,114</b>	<b>17,350</b>	(7.1)
<b>Marketing Exp.</b>	1,277	1,268	
<b>General &amp; Adm. Exp.</b>	960	1,044	
<b>Research &amp; Development</b>	10,306	8,131	
<b>Expected credit losses</b>	(51)	63	
<b>Operating Expenses</b>	12,492	10,506	18.9
<b>Operating Profit</b>	<b>3,622</b>	<b>6,844</b>	(47.1)
<b>Non-Operating gains (losses)</b>	477	(547)	
<b>Pretax Income</b>	4,099	6,297	(34.9)
<b>Tax Expenses</b>	475	896	
<b>Net Income to Phison</b>	<b>3,624</b>	<b>5,401</b>	(32.9)
<b>Basic EPS (NT\$)</b>	<b>18.48</b>	<b>27.71</b>	
<b>Key Financial Ratios (%)</b>			
<b>Gross Margin</b>	33.4%	28.8%	
<b>Operating Margin</b>	7.5%	11.4%	
<b>Net Profit Margin</b>	7.5%	9.0%	
<b>Average Exchange Rate--USD/NTD</b>	<b>31.15</b>	<b>29.80</b>	



# Balance Sheet Highlights

Taiwan-International Financial Reporting Standards (TIFRS)

NT\$m	4Q23	3Q23	4Q22
<b>Total Assets</b>	<b>64,963</b>	<b>60,285</b>	<b>59,990</b>
<b>Cash &amp; Current Financial assets at fair value</b>	15,201	15,329	17,819
<b>Account Receivable</b>	9,622	8,599	7,237
<b>Inventories</b>	24,410	21,331	20,390
<b>Long-term Investments</b>	4,763	3,961	4,443
<b>Net PP&amp;E</b>	7,448	7,453	7,598
<b>Total Liabilities</b>	<b>22,175</b>	<b>19,524</b>	<b>22,358</b>
<b>Current Liabilities</b>	21,801	14,755	17,599
<b>Bonds Payable</b>	-	3,464	3,442
<b>Total Equity</b>	<b>42,788</b>	<b>40,761</b>	<b>37,632</b>
<b>BVPS(NT\$)</b>	<b>213</b>	<b>203</b>	<b>190</b>
<b>Key Financial Ratios</b>			
<b>A/R Turnover Days</b>	64	67	48
<b>Inventory Turnover Days</b>	255	259	170
<b>ROE (%)</b>	9.01	5.24	14.41
<b>ROA (%)</b>	5.87	3.46	8.83

**1** Cash: the change is a result of operating profit and the management of inventory purchasing.

**2** Inventories: Inventories will be adjusted according to changes in the industry and to maintain a safe level based on operational needs.

**3** Total Equity: the change is a results of the Net profit of 9 months deducting the surplus distribution of 2H22 and 1H23 (NT\$4.5 Cash dividend per share for both periods).

## 【Supplemental Information】

### Reconciliations of TIFRS Results to Non-TIFRS Results

#### ◎ Forward-Looking Statement ◎

The Non Taiwan International Financial Reporting Standards(Non-TIFRS) results supplemented in this presentation are reconciliation results which exclude the financial impact of share-based payment, tax effect and other items.

The supplemental information is for reference only, and is not a substitute for information based on TIFRS. The final actual surplus distribution will be made in accordance with financial statements based on TIFRS.



# Reconciliations of TIFRS Results to Non-TIFRS Results (4Q23)

NT\$/million		4Q23	3Q23	4Q22	Q/Q (%)	Y/Y (%)
TIFRS	Operating Profit	1,541	525	1,243	193.5%	24.0%
	Operating Profit Margin (%)	9.79%	4.24%	10.12%		
Reconciliations	Shares-based payment	37	342	74		
Non-TIFRS	<b>Operating Profit</b>	<b>1,578</b>	<b>867</b>	<b>1,317</b>	82.0%	19.8%
	<b>Operating Profit Margin (%)</b>	<b>10.02%</b>	<b>7.00%</b>	<b>10.72%</b>		

TIFRS	Net Income to Phison	2,084	858	217	142.9%	860.4%
	Net Incomt (%)	13.23%	6.93%	177%		
	Basic EPS (NT\$)	10.39	4.32	1.14		
Reconciliations	Shares-based payment	37	342	74		
	Tax effect	28	(72)	(5)		
Non-TIFRS	<b>Net Income to Phison</b>	<b>2,149</b>	<b>1,128</b>	<b>286</b>	90.5%	651.4%
	<b>Net Incomt (%)</b>	<b>13.65%</b>	<b>9.10%</b>	<b>2.33%</b>		
	<b>Basic EPS (NT\$)</b>	<b>10.71</b>	<b>5.68</b>	<b>1.50</b>		

Note1: Please note, Non-TIFRS results here is a supplement and not a substitute for the Information based on TIFRS, which excluded the share-based payment, tax effect and other items. The final actual surplus distribution is based on the financial statements of TIFRS.

Note2: The numbers may not equal, it is due to rounding.

# Reconciliations of TIFRS Results to Non-TIFRS Results (2023 full-year)

NT\$/million		2023	2022	Y/Y (%)
TIFRS	Operating Profit	3,622	6,844	(47.1%)
	Operating Profit Margin (%)	7.51%	11.36%	
Reconciliations	Shares-based payment	519	360	
Non-TIFRS	<b>Operating Profit</b>	<b>4,141</b>	<b>7,204</b>	<b>(42.5%)</b>
	<b>Operating Profit Margin (%)</b>	<b>8.59%</b>	<b>11.96%</b>	

TIFRS	Net Income to Phison	3,624	5,401	(32.9%)
	Net Incomt (%)	7.52%	8.96%	
	Basic EPS (NT\$)	18.48	27.71	
Reconciliations	Shares-based payment	519	360	
	Tax effect	(73)	(51)	
Non-TIFRS	<b>Net Income to Phison</b>	<b>4,070</b>	<b>5,710</b>	<b>(28.7%)</b>
	<b>Net Incomt (%)</b>	<b>8.44%</b>	<b>9.48%</b>	
	<b>Basic EPS (NT\$)</b>	<b>20.75</b>	<b>29.29</b>	

Non-TIFRS EPS increased by approximately **NT\$2.27**.  
The transfer of treasury stocks to employees in **3Q23** had a cost impact, affecting EPS by approximately **NT\$1.1**.

Note1: Please note, Non-TIFRS results here is a supplement and not a substitute for the Information based on TIFRS, which excluded the share-based payment, tax effect and other items. The final actual surplus distribution is based on the financial statements of TIFRS.

Note2: The numbers may not equal, it is due to rounding.



# Consolidated Revenue for February 2024

**February Revenue**

**\$4.665**

Revenue up 42% YoY

Second highest in history for the same period

**Consolidated Revenue  
from Jan. to Feb.**

**\$9.751B**

Revenue up 58% YoY

Second highest in history for the same period

Revenue in \$NT



# Idea Exchange



# Modules Really Low Values?

**A Company**

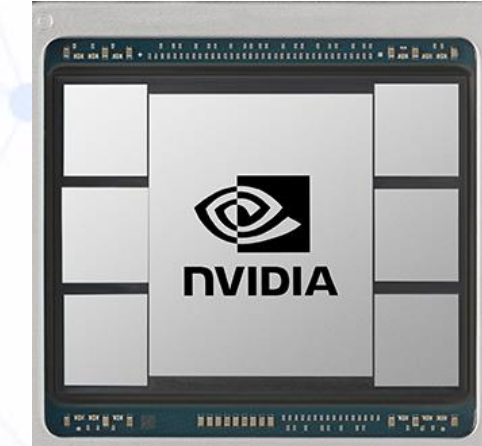


**N Company**



**To Modules**  
(Adding Values)

**From ICs**  
(as Foundation)





# Key **VALUE** Results

**Value-Added  
System Differentiation  
IC Design Capability**

**ASP improve  
Gross Profit improve**



**TSMC's Mark Liu:  
In the next five years,  
the growth rate of system companies  
will be 17%.**

**台積電 劉德音：未來五年  
系統公司成長率會是17%**



**MediaTek's Rick Tsai:  
MediaTek is already a system company.**

**蔡力行：聯發科已是系統公司**

The trend of IC design companies evolving into "system" companies has become increasingly obvious after the pandemic.

IC design companies, originally serving the role of providing chips, are gradually transitioning into key players offering subsystems, modules, and even taking a leading role in the design of entire end products.

IC設計公司變成「系統」公司的趨勢，在疫情之後有愈來愈顯著的跡象。

IC設計業者從原先提供晶片的角色，逐步變成提供子系統、模組，甚至是主導整個終端產品設計的關鍵角色。

Not only MediaTek but also major American IC design companies, including Intel, NVIDIA, Broadcom, Qualcomm, and other players, as well as some IDM (Integrated Device Manufacturer) giants, are all moving in this direction.

不僅聯發科如此，舉凡美系IC設計大廠包括英特爾（Intel）、NVIDIA、博通（Broadcom）、高通（Qualcomm）等業者，或是一些IDM大廠，都往這個大方向發展。

**Source:**

[https://www.digitimes.com.tw/tech/dt/n/shwnws.asp?utm\\_source=DailyNews&utm\\_medium=Email&utm\\_campaign=DT\\_UTM&id=681989&ct=a](https://www.digitimes.com.tw/tech/dt/n/shwnws.asp?utm_source=DailyNews&utm_medium=Email&utm_campaign=DT_UTM&id=681989&ct=a)

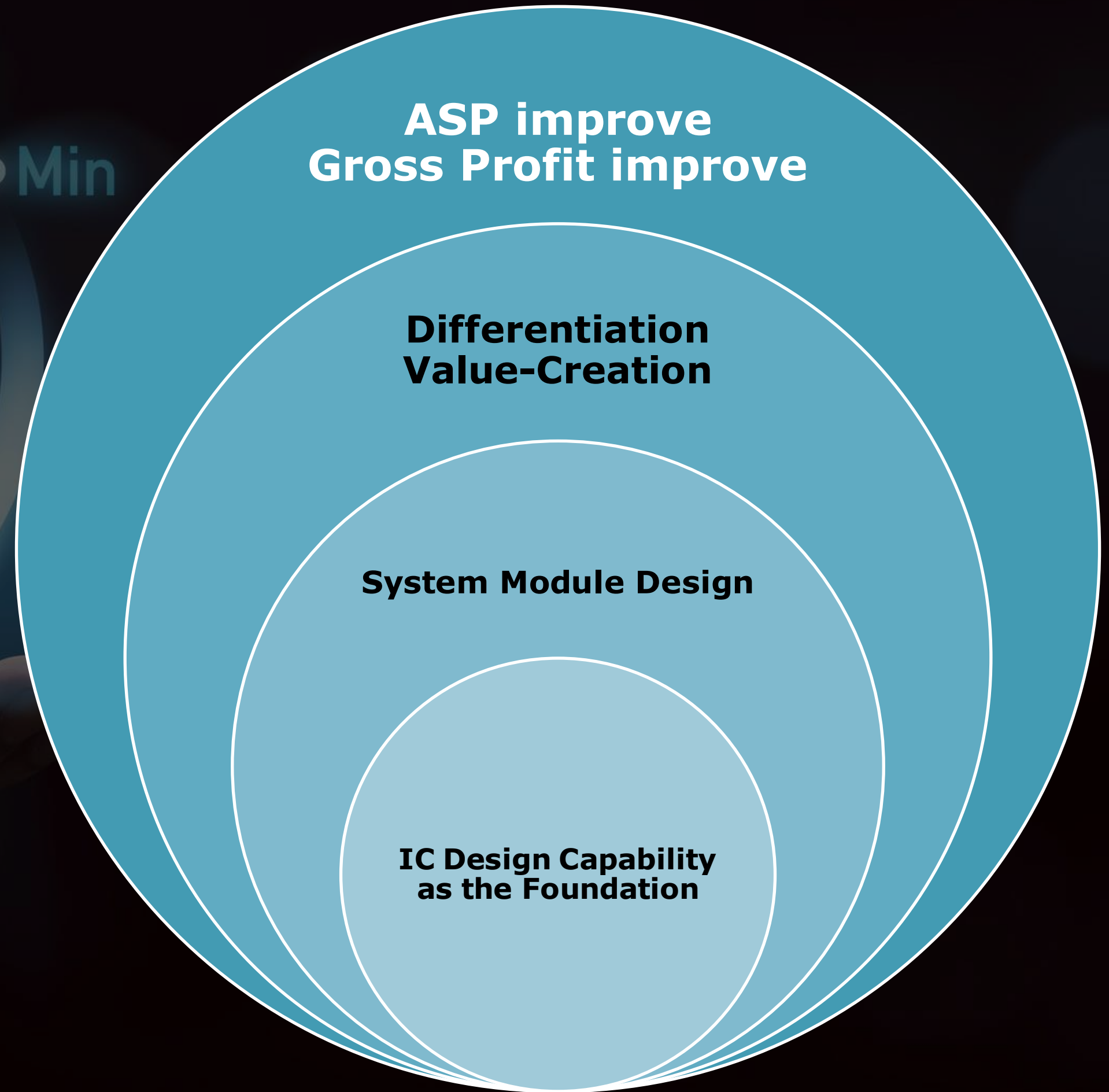
[https://youtu.be/YH0DIIm5\\_3FY?si=e8VwIhmDpyleECfz](https://youtu.be/YH0DIIm5_3FY?si=e8VwIhmDpyleECfz)

+ Max

— Min

# Phison's Value-Creation Business Model

VALUE





# **3 Business Highlights**



# Phison is Honored to be Recognized for its Excellence by Micron



**PHISON**



# Phison is Honored to be Recognized for its Excellence by KIOXIA



"The relationship between KIOXIA and Phison has evolved from early supplier cooperation to a special strategic partnership. Together, we have overcome various technical challenges and market demands, and have grown together to this day. In the future, KIOXIA and Phison will continue to deepen and broaden our cooperation, and through our leading-edge technology, we together will "uplift the world with NAND storage products."


**KIOXIA**

**PHISON**



# Client SSD Market

**Best SSD: Crucial T700**



(Image credit: Tom's Hardware)

Incredibly fast storage, ushering in the PCIe 5.0 era

**techradar.pro**



**Best OEM SSD  
Micron 3500 SSD**

(Image credit: Micron)

Micron's 3500 1TB SSD might just be among the [best SSDs](#) ever made – if not the best – having scored 100% on [TweakTown](#) and winning its highly coveted Editor's Choice Award.

Launched in December 2023, this 232-layer NAND SSD, which adopts a M.2 2280 form factor, comes in at 512GB, 1TB and 2TB variations, and features a superb **Phison E25 controller** that can also be found in the Crucial T500 SSD.

SSD – MSI Spatium M570 Pro Frozr M.2

**eTeknix**

**MSI Spatium M570 Pro SSD  
Best of 2023 Awards**



Tom's Hardware Best of 2023 Awards | Tom's Hardware ([tomshardware.com](https://tomshardware.com))  
"Simply the best OEM SSD ever made": Micron's new SSD gets glowing reviews thanks to new controller and new NAND — Expect it to come to a workstation PC near you | [TechRadar](#)  
[eTeknix Best of 2023 Awards - Page 11 - eTeknix](#)



# Automotive Storage

**15+**

Brands of Top 20 Car Makers  
Adopted Phison Auto Storage Solutions



# Mobile Storage

## Phison Launched UFS Solutions

- UFS 2.2 PS8327: Entry
- UFS 3.1 PS8329: Mid-range
- UFS 3.1 PS8325: High-end
- UFS 4.0 PS8361: Flagship

for Mobile Storage Performance





# Gaming Storage



**Kingston Fury Renegade 2TB NVMe SSD**  
Best M.2 SSD With Heatsink For Gaming

**TECH4 GAMERS**



**TECH4 GAMERS BEST OF**

**Best M.2 With Heatsink**

*Kingston Fury Renegade 2TB NVMe SSD*



**Sabrent Rocket 4 Plus 2TB**  
Best Overall M.2 SSD For Gaming

**TECH4 GAMERS**



**TECH4 GAMERS BEST OF**

**Best Overall**

*Sabrent Rocket 4 Plus 2TB*

5 Best M.2 SSDs For Gaming In 2024 (tech4gamers.com)



# Enterprise SSD

**3**

Tier-1 Server Brands  
**Enterprise PCIe 4.0 X1 SSD Design-in**





# Industrial Storage

**Phison Launched Specialized SSDs for Video and Surveillance Systems**



**Unleash Precision in Every Frame**

**PHISON S12DI Surveillance SSD**

**PHISON S17T Surveillance SSD**

**PHISON**

The advertisement features a worker in a white hard hat and safety glasses holding a tablet displaying a blue-tinted industrial floor plan. To the right, a security camera is shown against a purple and blue background with a city skyline and a network of glowing nodes. The Phison logo is in the bottom right corner of the ad.




# Signal Conditioning IC Market

2

Tier-1 Server Brands  
Phison PCIe 5.0 Redriver Design-in

**Verified**

Phison PCIe 5.0 Retimer PS7201  
PCI-SIG Verification



Systems with CEM Slot(s)						
Company	Product Name	Identifier	Spec Revision	Max Lane Width Tested	Function	Date Added
Phison	PS7201 PCIe 5.0 Retimer	PS7201 PCIe 5.0 16 lanes retimer	PCIe 5.0 at 32GT/s	x16	PCIe 5.0 16 lanes retimer	Sep 25, 2023



# **4 Technology Leadership Update**



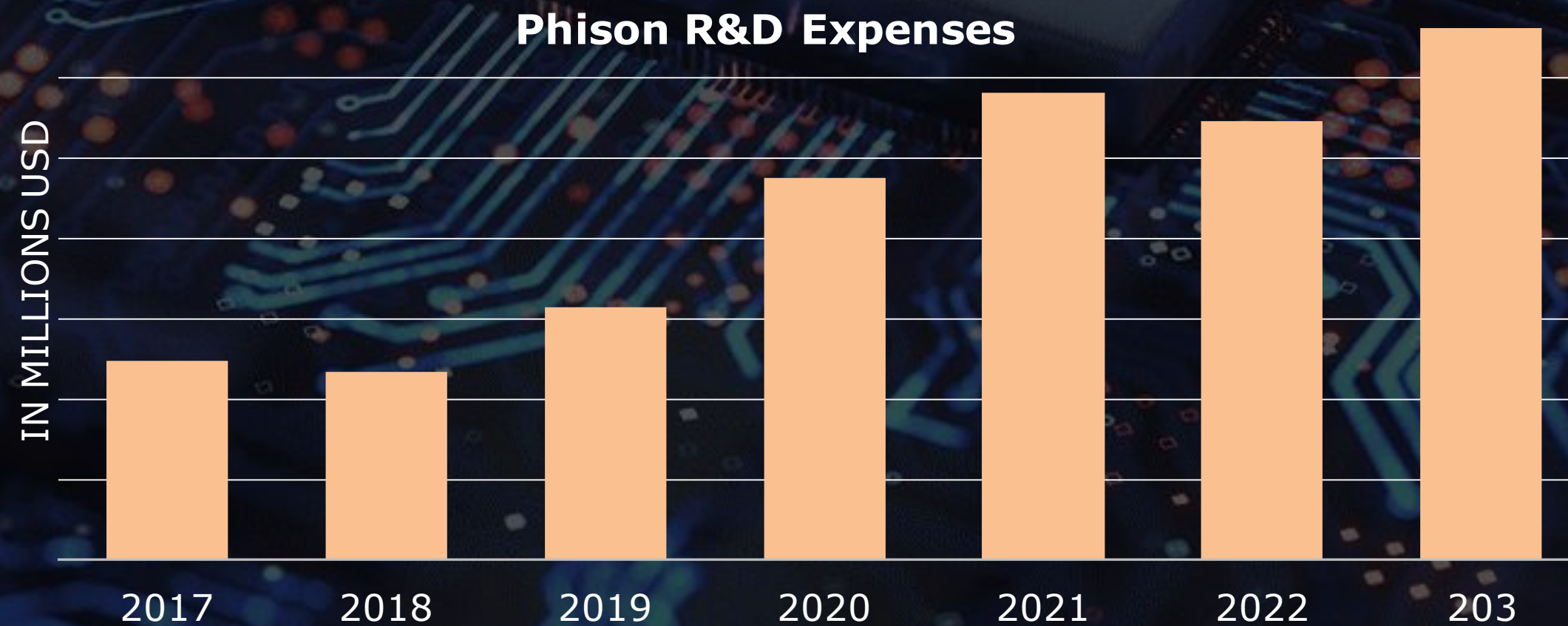
# Continue to Strengthen Phison Leading Technology Position

Category	2017	2018	2019	2020	2021	2022	2023
R&D Headcount							
R&D Exp. / Revenue (%)	9%	9%	11%	14%	13%	14%	<b>22%</b>
R&D Exp. / Operating Exp.	78%	79%	79%	81%	81%	77%	83%

**2000+**  
Global Patents

**3800+**  
Global Employees

**75%+**  
Proportion of Engineers



Note: Global patents including Granted and Pending