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PHISON

Financial Results & Company Outlook

2023 Third Quarter

K.S. Pua | CEO of Phison

November 7, 2023

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

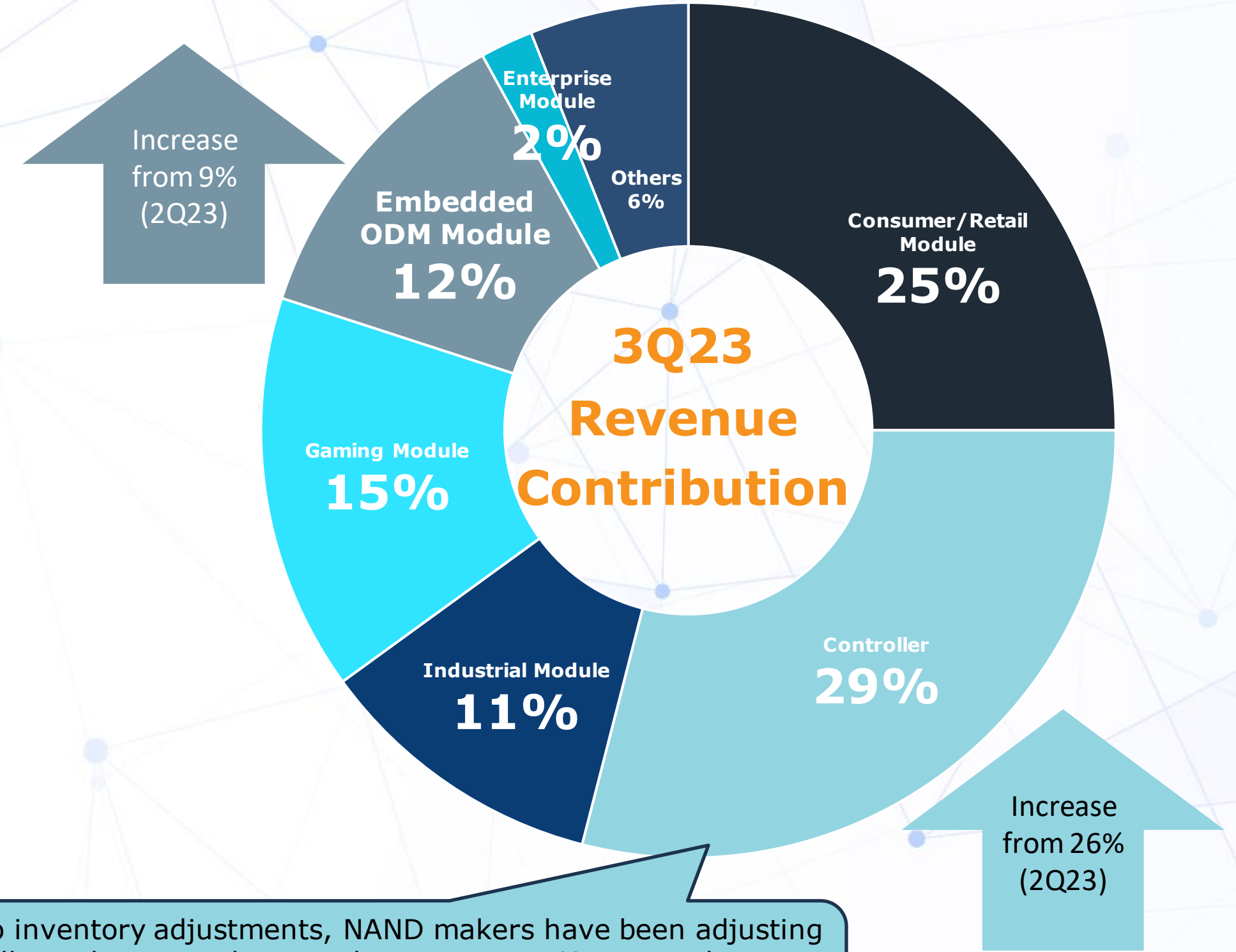
- 1** Phison's Business Transformation
- 2** Financial Results
- 3** Business Highlights
- 4** Technology Leadership Update
- 5** Q&A

1 Phison's Business Transformation

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

Revenue from Non-consumer/retail Products

70%+



Due to inventory adjustments, NAND makers have been adjusting controller orders over the past three quarters. However, the controller inventory for NAND makers has gradually returned to normal, leading to an increase in order visibility.

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

2 3Q23 Financial Results

3Q23 Revenue and Gross Profit

3Q23 Revenue

\$12.389B

Revenue down 15.0% YoY
Revenue up 23.8% QoQ

3Q23 Gross Profit

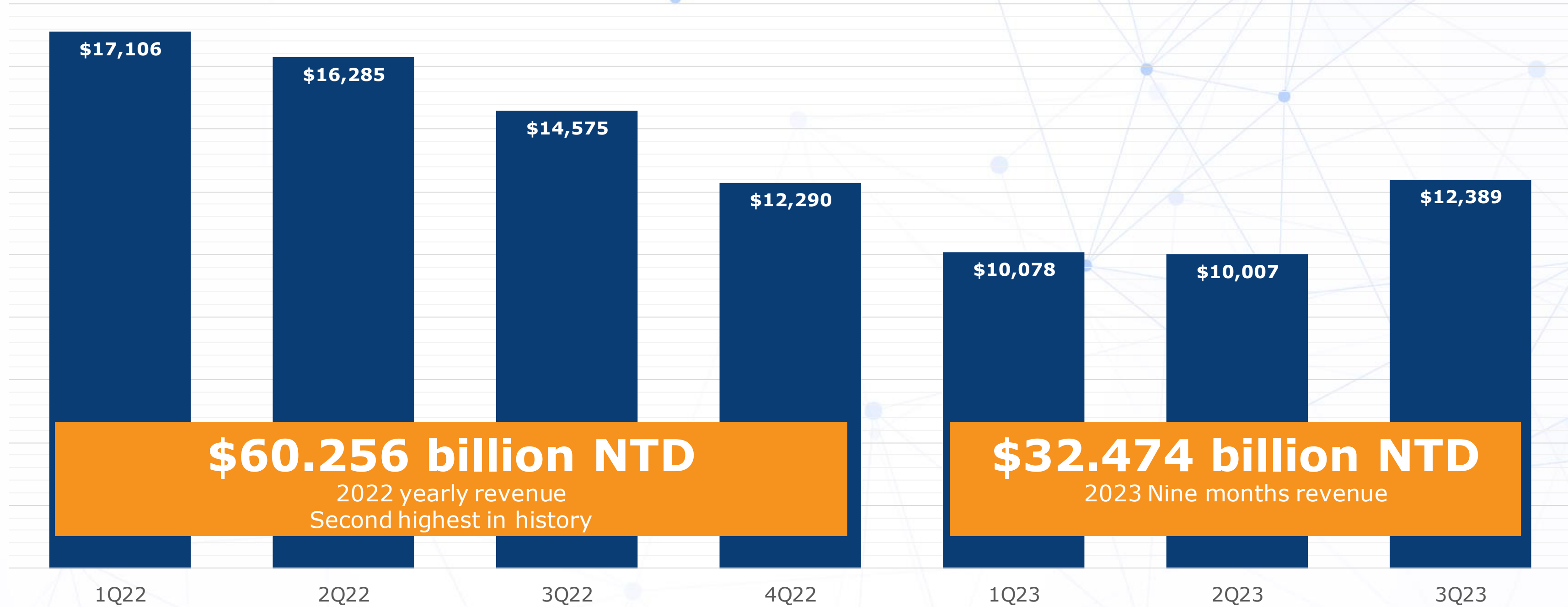
\$3.989B

Gross profit up 12.1% YoY
Gross profit up 22.7% QoQ

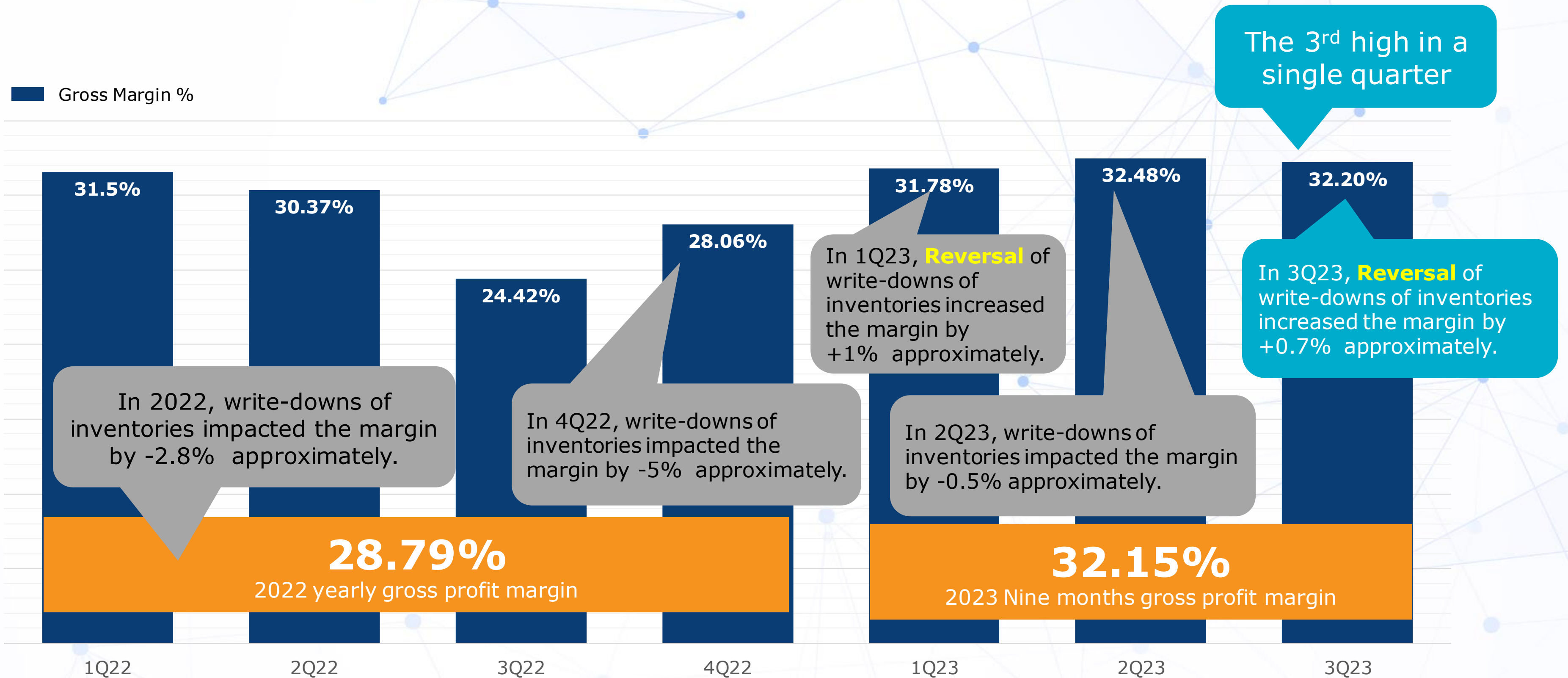
Revenue in \$NT

Revenue Trend

Revenue NT\$ millions



Gross Margin Rate Trend

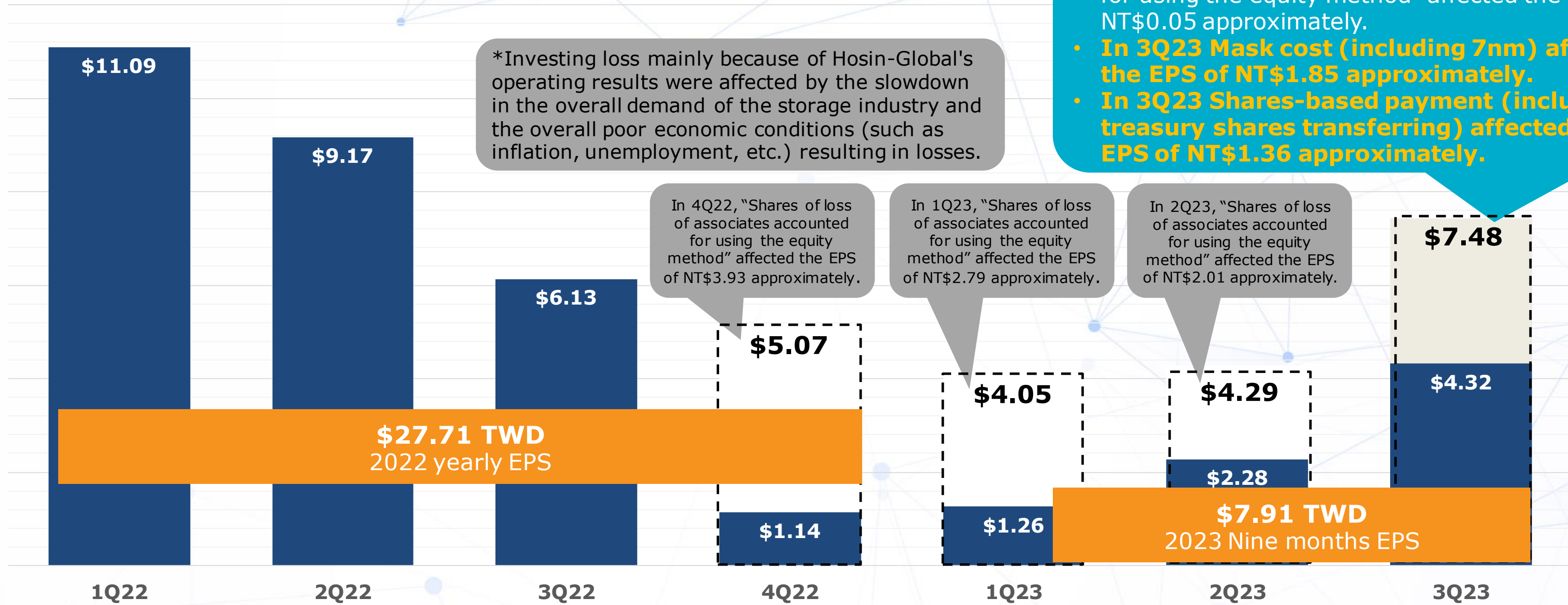


Note: By the accounting rule, we evaluate the lower of cost and the market price (LCM) to reserve the allowance of inventory price loss. When the market price hiking, we will reversal the allowance of inventory price loss.

Earnings Per Share Trend

In 3Q23 the associates accounted for using the equity method turning to be profitable (HSG).

In \$NT



- In 3Q23, "Shares of gain of associates accounted for using the equity method" affected the EPS of NT\$0.05 approximately.
- In 3Q23 Mask cost (including 7nm) affected the EPS of NT\$1.85 approximately.
- In 3Q23 Shares-based payment (including treasury shares transferring) affected the EPS of NT\$1.36 approximately.

*Investing loss mainly because of Hosin-Global's operating results were affected by the slowdown in the overall demand of the storage industry and the overall poor economic conditions (such as inflation, unemployment, etc.) resulting in losses.

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

3Q23 Income Statement Highlights

Taiwan-International Financial Reporting Standards (TIFRS)

The record high in a single quarter
The 3rd high in a single quarter

- 1 Revenue in NTD: QoQ is increased 23.8%. Revenue in USD: QoQ is increased 19.8%.
- 2 In 3Q23, The margin was 32.20% (3rd high of a single quarter). The reversal of allowance for inventory LCM affected the margin by +0.7% approximately.
- 3 3Q23 OPEX was higher than 2Q23. Due to increased mask cost (NT\$0.45bn), Shares-based payment (NT\$0.342bn, including treasury shares transferring) and employee compensation reserved. Phison keeps investing in research and development to maintain technological leadership.
- 4 The non-operating gains in 3Q23 mainly for the gains of forex and the gains from finance assets valuations.
- 5 The lower tax expenses is because of the recognized income tax benefits.

NT\$m	3Q23	2Q23	3Q22	Q/Q (%)	Y/Y (%)
Revenue in US\$Mn	393	328	482	19.8	(18.5)
Revenue	12,389	10,007	14,575	23.8	(15.0)
Gross Profit	3,989	3,250	3,559	22.7	12.1
Marketing Exp.	325	300	322		
General & Adm. Exp.	238	190	209		
Research & Development	2,896	1,984	1,786		
Expected credit losses	5	59	21		
Operating Expenses	3,464	2,533	2,338	36.8	48.2
Operating Profit	525	717	1,221	(26.8)	(57.0)
Non-Operating gains (losses)	427	(67)	115		
Pretax Income	952	650	1,336	46.5	(28.7)
Tax Expenses	94	209	144		
Net Income to Phison	858	441	1,192	94.6	(28.0)
Basic EPS (NT\$)	4.32	2.28	6.13		
Key Financial Ratios (%)					
Gross Margin	32.2%	32.5%	24.4%		
Operating Margin	4.2%	7.2%	8.4%		
Net Profit Margin	6.9%	4.4%	8.2%		
Average Exchange Rate--USD/NTD	30.93	30.55	29.28		

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

FY23-Nine Months Income Statement Highlights

Taiwan-International Financial Reporting Standards (TIFRS)

Historical High
for the same period

- 1 For 9 month end of Sept 30. Revenue in NTD: YoY is decreased 32.3%. Revenue in USD: YoY is decreased 36.3%.
- 2 For 9 month end of Sept 30. The margin was 32.15% (record high in the same period). The reversal of allowance for inventory LCM increased the margin by 0.47% approximately.
- 3 For 9 month end of Sept 30. OPEX was flat to 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 For 9 month end of Sept 30. 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	9 months/23	9 months/22	Y/Y (%)
Revenue in US \$Mn	1,052	1,651	(36.3)
Revenue	32,474	47,966	(32.3)
Gross Profit	10,441	13,901	(24.9)
Marketing Exp.	886	934	
General & Adm. Exp.	605	839	
Research & Development	6,880	6,488	
Expected credit losses	(11)	39	
Operating Expenses	8,360	8,300	0.7
Operating Profit	2,081	5,601	(62.8)
Non-Operating gains (losses)	(165)	535	
Pretax Income	1,916	6,136	(68.8)
Tax Expenses	375	952	
Net Income to Phison	1,541	5,184	(70.3)
Basic EPS (NT\$)	7.91	26.42	
Key Financial Ratios (%)			
Gross Margin	32.15%	29.0%	
Operating Margin	6.4%	11.7%	
Net Profit Margin	4.7%	10.8%	
Average Exchange Rate--USD/NTD	30.93	29.28	

Balance Sheet Highlights

Taiwan-International Financial Reporting Standards (TIFRS)

NT\$m	3Q23	2Q23	3Q22
Total Assets	60,285	54,049	59,130
Cash & Current Financial assets at fair value	15,329	13,366	14,475
Account Receivable	8,599	6,509	8,825
Inventories	21,331	20,590	21,075
Long-term Investments	3,961	3,654	5,007
Net PP&E	7,453	7,553	7,563
Total Liabilities	19,524	15,461	22,451
Current Liabilities	14,755	10,704	16,581
Bonds Payable	3,464	3,457	3,435
Total Equity	40,761	38,588	36,679
BVPS(NT\$)	203	198	187
Key Financial Ratios			
A/R Turnover Days	67	63	50
Inventory Turnover Days	259	274	163
ROE (%)	5.24	3.58	18.68
ROA (%)	3.46	2.44	11.36

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

NT\$/million		3Q23	2Q23	3Q22	Q/Q (%)	Y/Y (%)
TIFRS	Operating Profit	525	717	1,221	(26.8%)	(57.0%)
	Operating Profit Margin (%)	4.24%	7.17%	8.38%		
Reconciliations	Shares-based payment	342	66	85		
Non-TIFRS	Operating Profit	867	783	1,306	10.7%	(33.6%)
	Operating Profit Margin (%)	7.00%	7.82%	8.96%		

TIFRS	Net Income to Phison	858	441	1,192	94.6%	(28.0%)
	Net Incomt (%)	6.93%	4.40%	8.18%		
	Basic EPS (NT\$)	4.32	2.28	6.13		
Reconciliations	Shares-based payment	342	66	85		
	Tax effect	(72)	(19)	(18)		
Non-TIFRS	Net Income to Phison	1,128	488	1,259	131.1%	(10.4%)
	Net Incomt (%)	9.10%	4.88%	8.64%		
	Basic EPS (NT\$)	5.68	2.52	6.39		

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 October 2023

October Revenue

\$5.159B

Revenue up 3% MoM

Second highest in history for the same period

**Consolidated Revenue
from Jan. to Oct.**

\$37.633B

Revenue down 27% YoY

Revenue in \$NT

Idea Exchange

Modules Really Low Values?

A Company



N Company



To Modules
(Adding Values)

From ICs
(as Foundation)



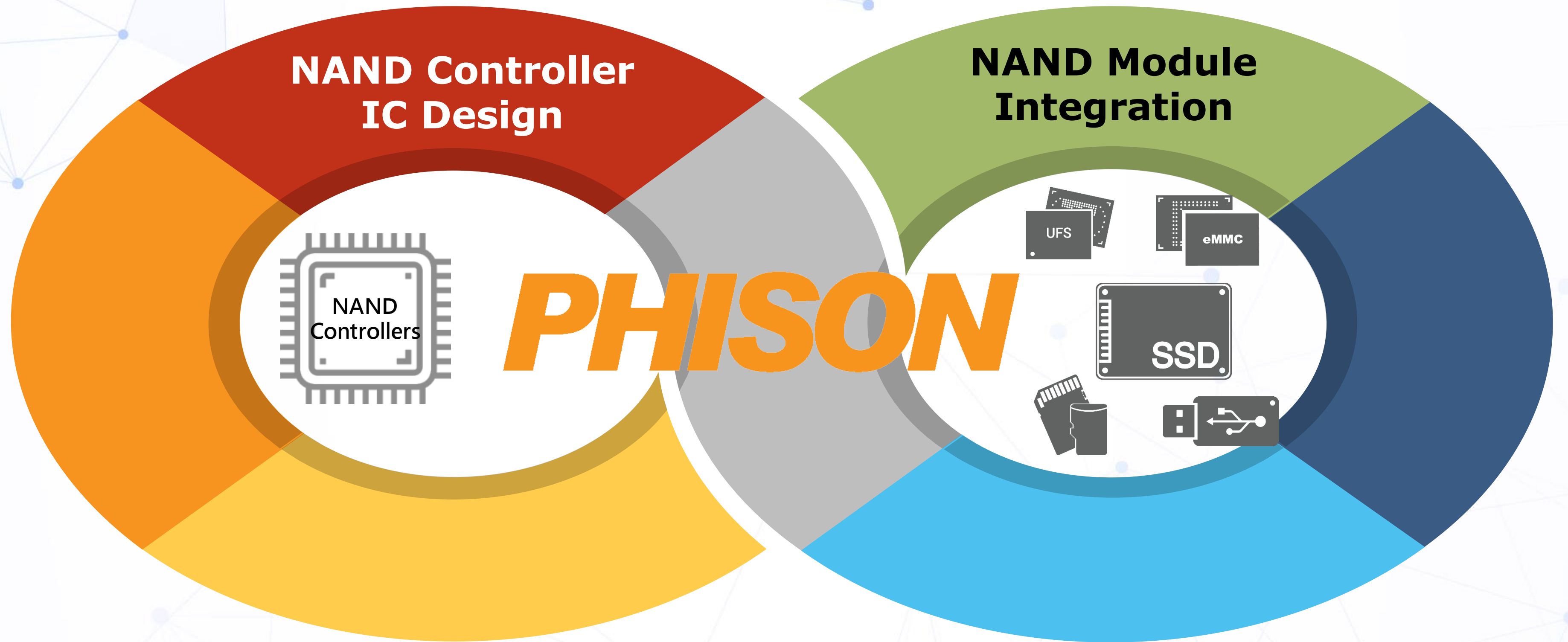
Key **VALUE** Results

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

**ASP improve
Gross Profit improve**

Phison

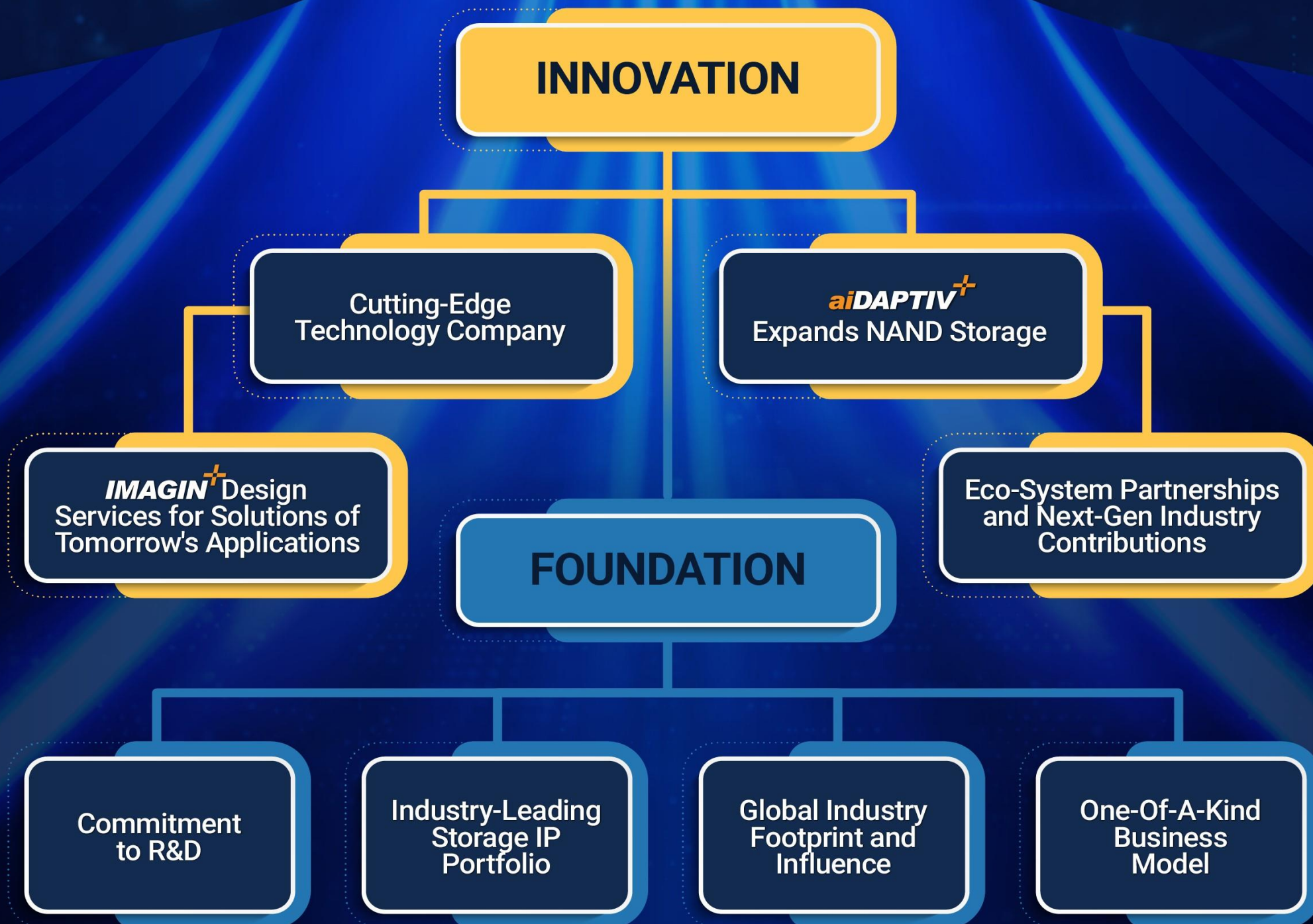
More Than a NAND Controllers and NAND ODM modules supplier



PHISON

THE FOUNDATION THAT ACCELERATES INNOVATION™

A holistic vision for high-performance storage in the modern data ecosystem



PHISON

Providing Value-Added Modules with IC Design Capabilities

Phison, the **Foundation** that Accelerates **Innovation**

Foundation
Vertical integrated IC design & system know-how

Innovation
Bring expertise to unique innovative designs while maximizing profit

2-1 Phison Proposed to Prepay NAND Vendors to Secure a Stable NAND Supply

Phison Proposed to Prepay NAND Vendors to Secure a Stable NAND Supply

Supply Constraints for Some Products

Due to limited NAND flash manufacturing capacity from NAND suppliers, some of Phison's products experienced supply constraints in the fourth quarter. Phison's board of directors passed a resolution on November 7 to consider prepaying NAND suppliers to strengthen the partnership and ensure a stable supply.

Seizing Future Quarter Growth Opportunities

To seize growth opportunities in the coming quarters, research institutions predict a potential NAND supply shortage in 2024, with overall NAND revenue expected to reverse and increase in that year. Phison continues to expand its collaboration with high-end application and value-added design service customers, anticipating an expansion of its business scale as the market turns around.

2-2

Phison Proposed to Issue the Second Domestic Unsecured Convertible Bonds

Phison Proposed to Issue the Second Domestic Unsecured Convertible Bonds

- Proposal for Issue of Domestic Unsecured Corporate Bonds: The Board approved on 11/7 that the company to offer and issue the second domestic unsecured convertible corporate bonds, **in order to enrich working capital to improve capital scheduling capabilities.**
- The estimated **total number of bonds issued this time will be limited to 60,000**, and the denomination of each bond will be NT\$100 thousand, and the total denomination of the bonds will be expected to be limited to **NT\$6,000,000 thousand (6 billion NTD)**. The issuance is based on 100-101% of the par value, and the estimated total issuance limit is NT\$6,060,000 thousand. The tenor is five years, and the coupon rate is 0%. The book-building method is proposed to be used for public under writing.
- After the actual issuance conditions of this case are submitted to the competent authority to declare and take effect, the issuance conditions and the actual issuance operations will be set in accordance with relevant laws and regulations and the financial environment and market conditions.

Reasons for the Issuance of the Second Domestic Unsecured Convertible Bonds (1/2)

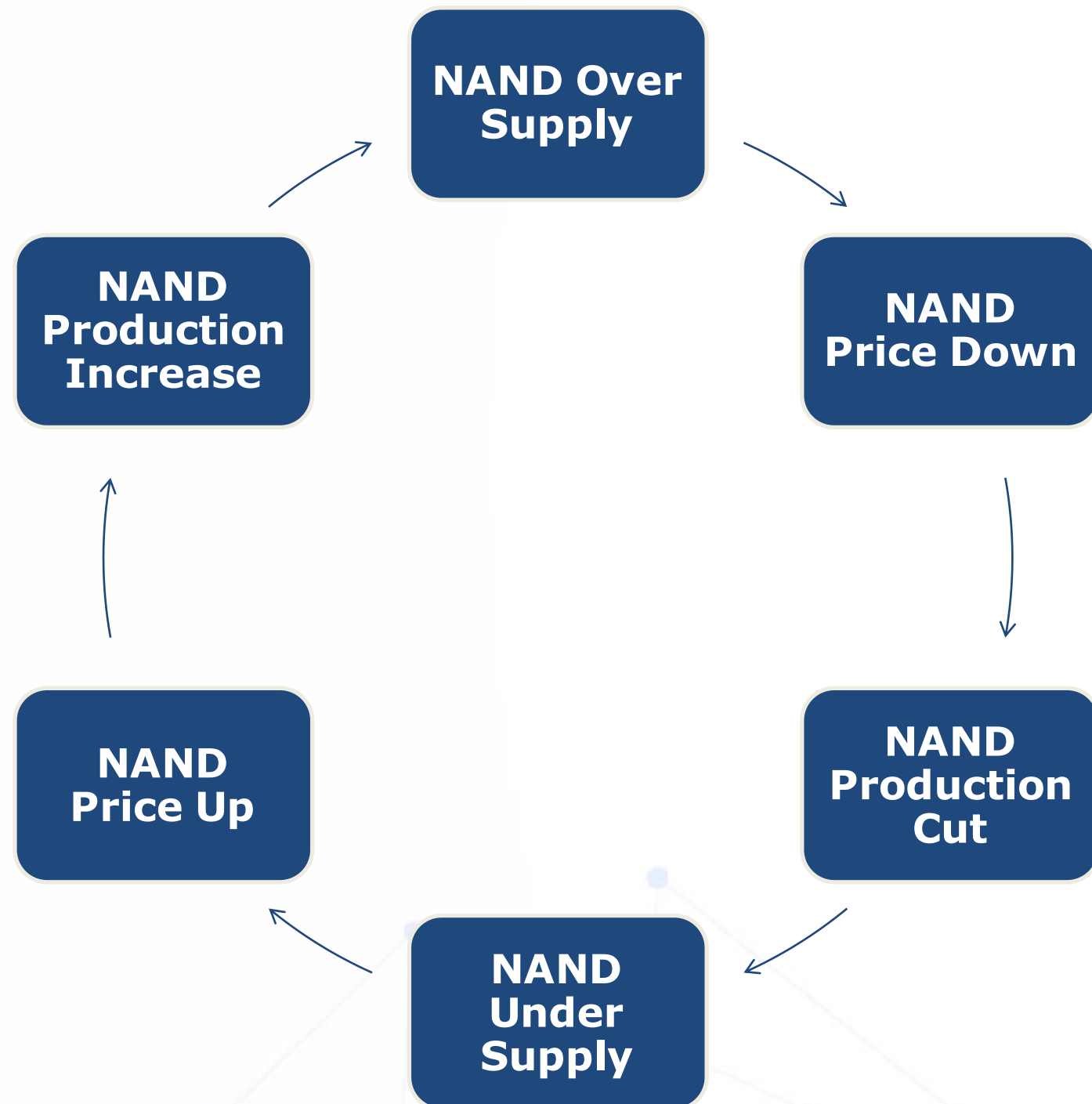
Expanding Business Scale Needed

Due to market expectations of a gradual turnaround and growth in overall NAND demand in 2024, Phison needs to expand its business scale to meet the demands of global customers and partners and to seize opportunities.

Investing in Advanced Process Controllers

As the NAND application market continues to demand high-speed transmission and storage performance, and the variety of application systems with NAND storage devices keeps expanding, Phison must continue to recruit R&D engineers and increase investment in advanced process controller development to maintain the company's technological leadership.

Reasons for the Issuance of the Second Domestic Unsecured Convertible Bonds (2/2)



NAND Over Supply

NAND vendors need Phison to purchase more NAND to absorb excess inventory. Procuring NAND helps Phison simultaneously reduce NAND inventory costs and strengthen its collaboration with NAND vendors (**requires sufficient funding**).

NAND Under Supply

Phison, with a strong history of cooperation with NAND vendors, continues to secure a relatively stable supply of NAND (**requires sufficient funding**).

Regardless of NAND Over/Under Supply

Phison needs to have **sufficient funding** in both NAND over and under supply scenarios. This enables Phison to use flexible procurement strategies to capture growth opportunities and maximize revenue and profits during supply and demand fluctuations.

3 Business Highlights

Client SSD Market



Through transformation, Phison will continue to expand its market share in the client SSD market.

24%+

Phison Client SSD Controller Shipments Market Share @2022

Automotive Storage

15+

Brands of Top 20 Car Makers
Adopted Phison Auto Storage Solutions

40%+

Phison Auto NAND Controller
Shipments Market Share @2022

Mobile Storage

12+

Host Chipset Makers Verified

MEDIA TEK

Qualcomm

UNISOC

intel

NXP

NOVATEK

Mstar

Amlogic

Rockchip

ALLWINER

Sigmastar

芯驰 SemiDrive

24%+

Phison eMMC Controller
Shipments Market Share @2022

Gaming Storage

Design-in Examples



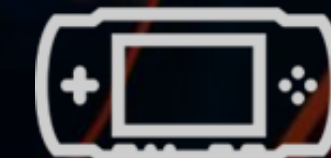
Gaming Consoles

Gaming Laptops



Gaming Desktops

Handheld Gaming Consoles



Enterprise SSD

Phison
Closely Collaborating with
Server Customers Worldwide



Industrial Storage

3Q23 Design-in Projects



Battery Storage
Phison S17T SATA SSD Inside



Smart Mail-Box
Phison S17T SATA SSD Inside



ATM Machine
Phison E13T PCIe 3.0 SSD Inside



CCTV Broadcasting system (NVR)
Phison S12DI SATA SSD Inside

Space Storage

The World's First

4TB SSD on the ISS
(International Space Station)



Signal Conditioning IC Market

100+

Phison PCIe 5.0 Redriver
Design-in Projects

Verified


Phison PCIe 5.0 Retimer PS7201
PCI-SIG Verification

50%+

Phison PCIe 5.0 Redriver
Shipments Market Share @2022

1H24

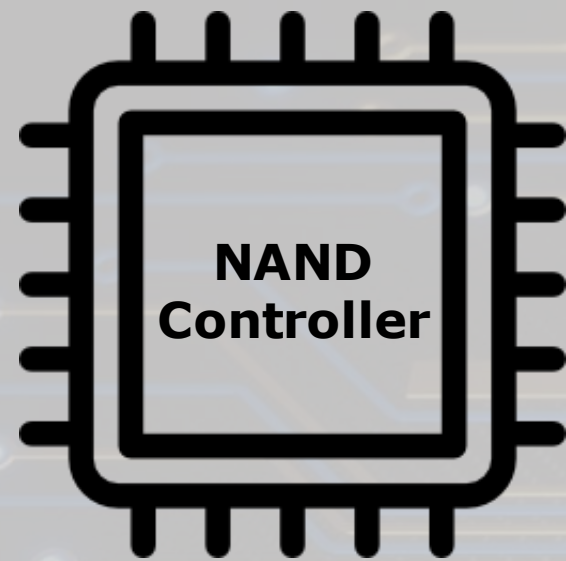
Phison PCIe 5.0 Retimer
Start Shipping

PCI Express 5.0 

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

3Q23 Design Service Highlights



Customized

- PCIe 4.0/5.0
- UFS 2.2/3.1/4.0
- eMMC 5.1



Customized

- UFS for mobile applications
- eMMC for entry phones



Customized

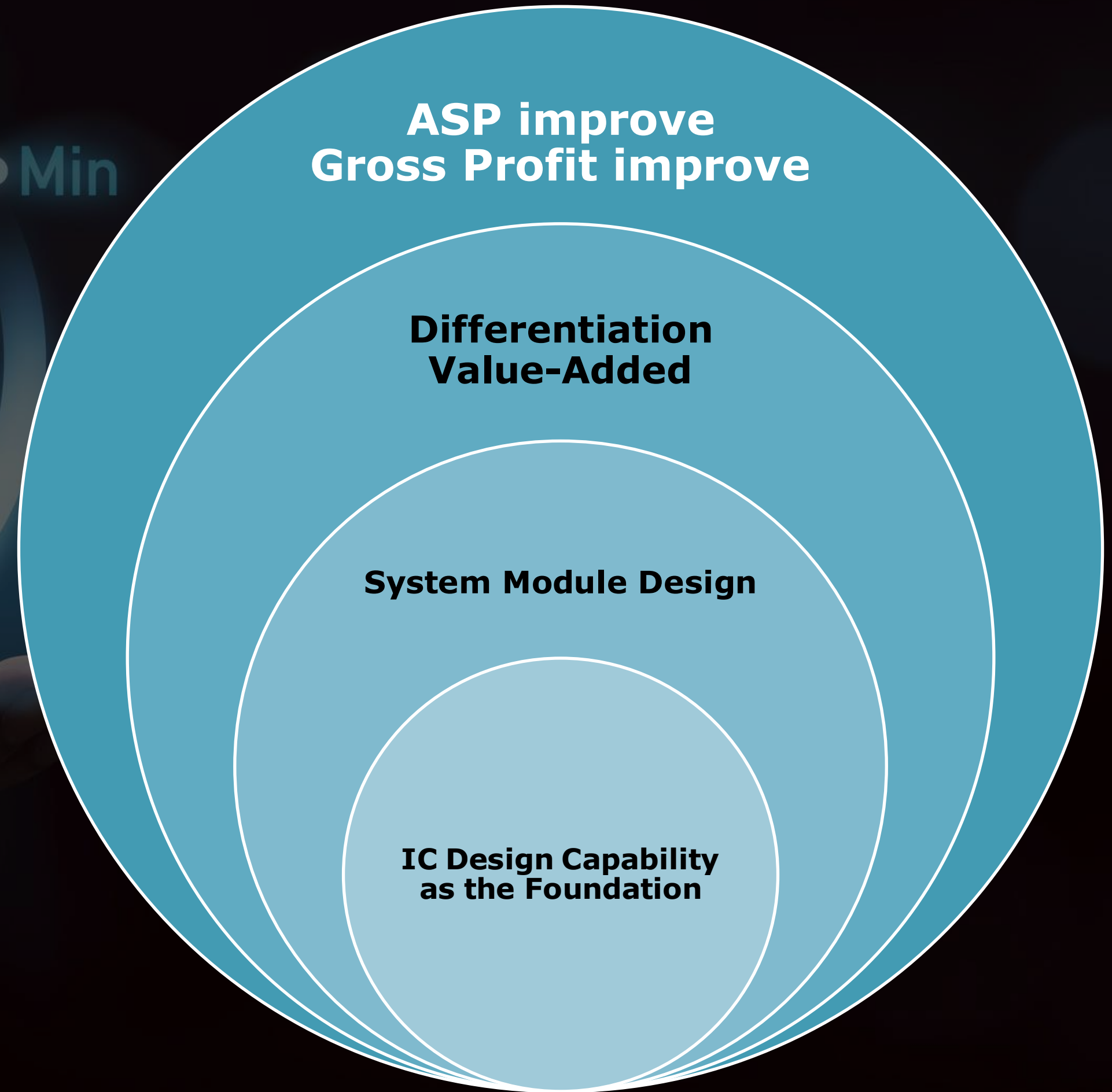
- PCIe 4.0
- FW & ASIC modification
- Analog
- Testing conditions

+ Max

— Min

Phison's Value-added Business Model

VALUE



4 Technology Leadership Update

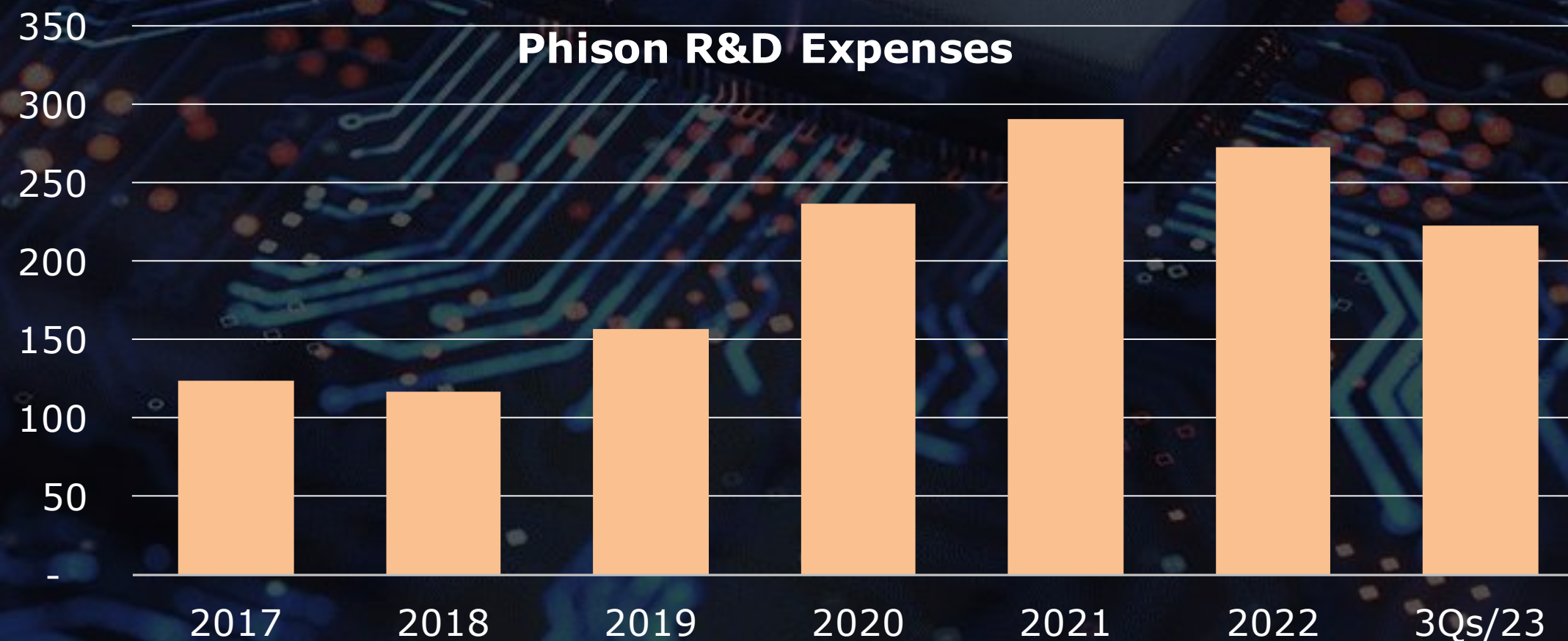
Continue to Strengthen Phison Leading Technology Position

Category	2017	2018	2019	2020	2021	2022	3Qs/23
R&D Headcount	942	1,112	1,450	1,531	2,228	2,891	3,023
R&D Exp. / Revenue (%)	9%	9%	11%	14%	13%	14%	21%
R&D Exp. / Operating Exp.	78%	79%	79%	81%	81%	77%	82%

2000+
Global Patents

3800+
Global Employees

75%+
Proportion of Engineers



Note: Global patents including Granted and Pending