



Fourth Quarter 2024 Earnings Release

ASE Technology Holding

aseglobal.com

13 February, 2025

Safe Harbor Notice



This presentation contains "forward-looking statements" within the meaning of Section 27A of the United States Securities Act of 1933, as amended, and Section 21E of the United States Securities Exchange Act of 1934, as amended. These statements are made under the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995. Although these forward-looking statements, which may include statements regarding our future results of operations, financial condition or business prospects, are based on our own information and information from other sources we believe to be reliable, you should not place undue reliance on these forward-looking statements, which apply only as of the date of this press release. The words "anticipate," "believe," "estimate," "expect," "intend," "plan" and similar expressions, as they relate to us, are intended to identify these forward-looking statements in this press release. These forward-looking statements are necessarily estimates reflecting the best judgment of our senior management and our actual results of operations, financial condition or business prospects may differ materially from those expressed or implied by the forward-looking statements for reasons including, among others, risks associated with cyclicity and market conditions in the semiconductor or electronic industry; changes in our regulatory environment, including our ability to comply with new or stricter environmental regulations and to resolve environmental liabilities; demand for the outsourced semiconductor packaging, testing and electronic manufacturing services we offer and for such outsourced services generally; the highly competitive semiconductor or manufacturing industry we are involved in; our ability to introduce new technologies in order to remain competitive; international business activities; our business strategy; our future expansion plans and capital expenditures; the strained relationship between the Republic of China and the People's Republic of China; general economic and political conditions; the recent shift in United States trade policies; possible disruptions in commercial activities caused by natural or human-induced disasters; fluctuations in foreign currency exchange rates; and other factors. The announced results of the full year of 2024 are preliminary and subject to audit adjustments. For a discussion of these risks and other factors, please see the documents we file from time to time with the Securities and Exchange Commission, including the 2023 Annual Report on Form 20-F filed on April 3, 2024.

2024 Recap



- Consolidated revenues grew 2% YoY in 2024, with ATM revenues up 3% YoY.
- Leading-edge advanced packaging and testing revenues were over US\$600 million, accounting for around 6% of ATM revenues, up from US\$250 million in 2023.
- Our testing business grew 9% YoY in 2024, and in particular, grew 18% YoY in 4Q24.
- Machinery capex was US\$1.9 billion, up a billion versus 2023 mainly driven by advanced packaging and testing.

Note: All dollar figures are in NTD unless otherwise stated.



2025 Outlook



- ATM business to outgrow the logic semiconductor market driven by strong momentum of our leading-edge advanced packaging and our testing businesses.
- Leading-edge advanced packaging and testing revenues to increase by US\$1 billion versus 2024, contributing 10% of growth, while the general segment to grow mid-to-high single digit YoY.
- Expanding investment in R&D, human capital, advanced capacity, and smart factory buildings.



Market Landscape & ASE Positioning



- Total semiconductor revenues are likely to reach \$1 trillion in the next decade.
- ASE is well-positioned to benefit from the strong demand of leading-edge advanced technology and the growing volume of peripheral chips on accelerating edge AI adoption.
- A comprehensive technology toolbox (3D, 2.5D, fan-out, panel level, SiP, CPO, Power, automation) and scale advantages make ASE the preferred partner for customers.
- ASE's strong financial performance and flexibility/agility in handling business model evolutions further widen the moat against competitors.



Consolidated Statements of Income



Quarterly Comparison
(Unaudited)

(NT\$ million)	Q4 / 2024	%	Q3 / 2024 ²	%	Q4 / 2023	%	QoQ	YoY
Net Revenues:								
ATM	87,208	53.7%	84,545	52.8%	80,761	50.3%	3%	8%
EMS	74,243	45.8%	74,871	46.8%	79,155	49.3%	-1%	-6%
Others	813	0.5%	689	0.4%	665	0.4%	18%	22%
Total Net Revenues	162,264	100.0%	160,105	100.0%	160,581	100.0%	1%	1%
Gross Profit	26,631	16.4%	26,426	16.5%	25,761	16.0%	1%	3%
Operating Income (Loss)	11,211	6.9%	11,470	7.2%	11,815	7.4%	-2%	-5%
Pretax Income (Loss)	11,441	7.1%	12,325	7.7%	12,367	7.7%	-7%	-7%
Income Tax Benefit (Expense)	(1,862)	-1.1%	(2,052)	-1.3%	(2,461)	-1.5%		
Non-controlling Interests	(267)	-0.2%	(540)	-0.3%	(514)	-0.3%		
Net Income Attributable to Shareholders of the Parent	9,312	5.7%	9,733	6.1%	9,392	5.8%	-4%	-1%
Basic EPS(NT\$)	2.15		2.25		2.18		-4%	-1%
Diluted EPS(NT\$)	2.07		2.18		2.13		-5%	-3%

Additional Commentary From Management¹:

Gross Profit excl. PPA expenses	27,274	16.8%	27,360	17.1%	26,668	16.6%	0%	2%
Operating Income excl. PPA expenses	12,117	7.5%	12,668	7.9%	12,984	8.1%	-4%	-7%
Net income attributable to shareholders of the parent excl. PPA expenses	10,187	6.3%	10,906	6.8%	10,544	6.6%	-7%	-3%
Basic EPS(NT\$) excl. PPA expenses	2.36		2.52		2.45		-6%	-4%

¹: We exclude depreciation, amortization, other expenses, and income tax benefit in connection with business combinations. Please refer to Appendix 1 for details.

²: As of December 31, 2024, we have completed the purchase price allocation of business combination, and have retrospectively adjusted the consolidated financial results for the prior period.

Consolidated Statements of Income



Yearly Comparison
(unaudited)

(NT\$ million)	FY / 2024	%	FY / 2023	%	YoY
Net Revenues:					
ATM	321,291	54.0%	311,131	53.5%	3%
EMS	271,293	45.5%	268,218	46.1%	1%
Others	2,826	0.5%	2,565	0.4%	10%
Total Net Revenues	595,410	100.0%	581,914	100.0%	2%
Gross Profit	96,932	16.3%	91,757	15.8%	6%
Operating Income (Loss)	39,167	6.6%	40,328	6.9%	-3%
Pretax Income (Loss)	41,684	7.0%	42,600	7.3%	-2%
Income Tax Benefit (Expense)	(7,758)	-1.3%	(9,043)	-1.6%	
Non-controlling Interest	(1,443)	-0.2%	(1,832)	-0.3%	
Net Income Attributable to Shareholders of the Parent	32,483	5.5%	31,725	5.5%	2%
Basic EPS	7.52		7.39		2%
Diluted EPS	7.23		7.18		1%

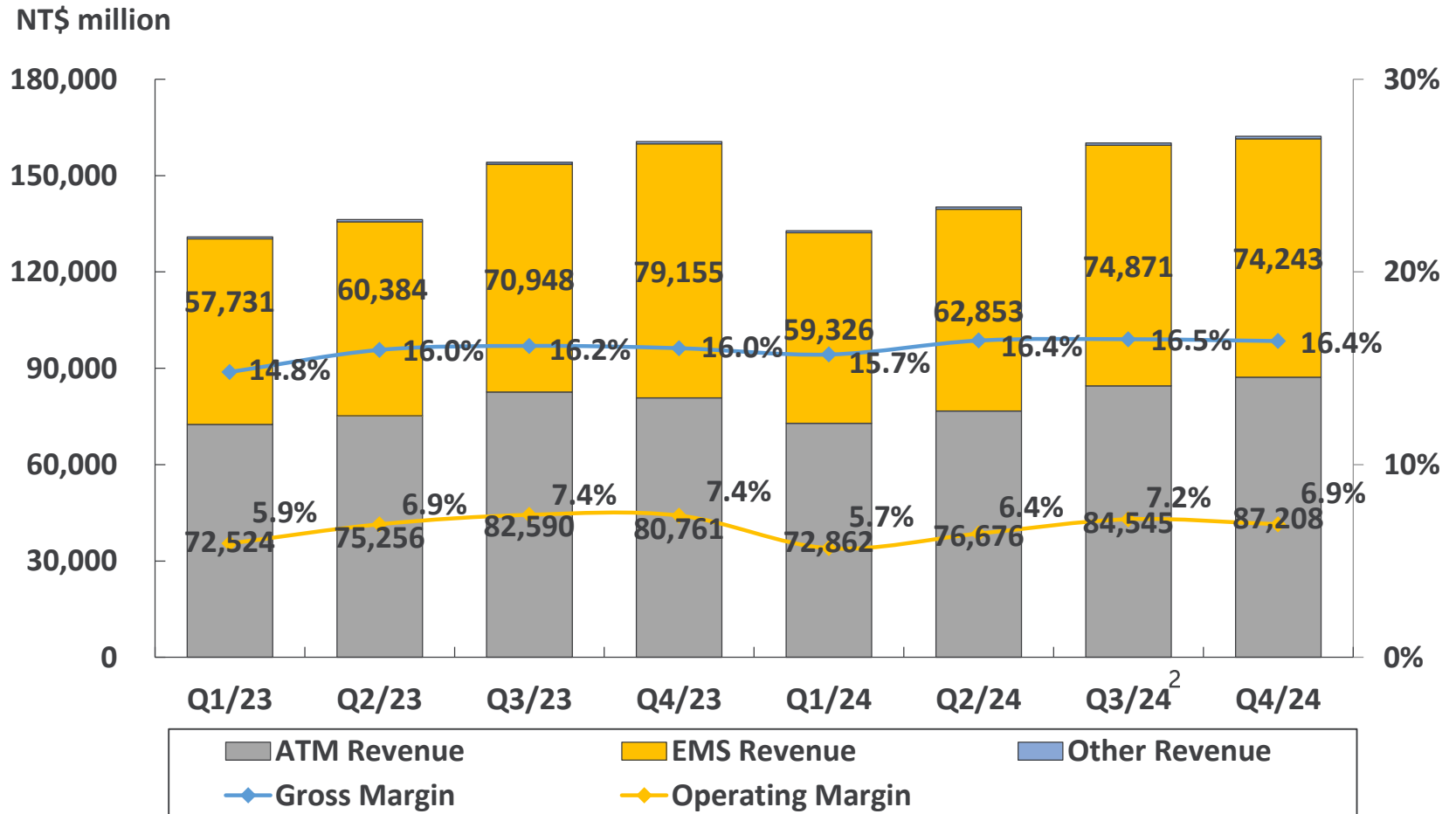
Additional Commentary From Management¹:

Gross Profit excl. PPA expenses	100,423	16.9%	95,401	16.4%	5%
Operating Income excl. PPA expense:	43,710	7.3%	45,021	7.7%	-3%
Net income attributable to shareholders of the parent excl. PPA expenses	36,905	6.2%	36,352	6.2%	2%
Basic EPS excl. PPA expenses	8.54		8.46		1%

¹: We exclude depreciation, amortization, other expenses, and income tax benefit in connection with business combinations. Please refer to Appendix 1 for details.

Consolidated Operations

(Unaudited)



²: As of December 31, 2024, we have completed the purchase price allocation of business combination, and have retrospectively adjusted the consolidated financial results for the prior period.

ATM Statements of Income



Quarterly Comparison
(Unaudited)

(NT\$ million)	Q4 / 2024	%	Q3 / 2024 ²	%	Q4 / 2023	%	QoQ	YoY
Net Revenues:								
Packaging	71,342	80.7%	70,290	81.9%	67,378	82.1%	1%	6%
Testing	15,713	17.8%	14,124	16.5%	13,363	16.3%	11%	18%
Direct Material	1,233	1.4%	1,295	1.5%	1,205	1.5%	-5%	2%
Others	75	0.1%	81	0.1%	58	0.1%	-7%	29%
Total Net Revenues	88,363	100.0%	85,790	100.0%	82,004	100.0%	3%	8%
Gross Profit	20,609	23.3%	19,795	23.1%	19,218	23.4%	4%	7%
Operating Income (Loss)	9,435	10.7%	9,219	10.7%	9,212	11.2%	2%	2%

Additional Commentary From Management¹:

Gross Profit excl. PPA expenses	21,213	24.0%	20,689	24.1%	20,091	24.5%	3%	6%
Operating Income excl. PPA expenses	10,289	11.6%	10,363	12.1%	10,335	12.6%	-1%	0%

¹: We exclude depreciation, amortization, other expenses, and income tax benefit in connection with business combinations. Please refer to Appendix 1 for details.

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ATM Statements of Income



Yearly Comparison
(unaudited)

(NT\$ million)	FY / 2024	%	FY / 2023	%	YoY
Net Revenues:					
Packaging	265,858	81.6%	260,486	82.7%	2%
Testing	54,562	16.7%	49,881	15.8%	9%
Direct Material	5,130	1.6%	4,574	1.4%	12%
Others	325	0.1%	174	0.1%	87%
Total Net Revenues	325,875	100.0%	315,115	100.0%	3%
Gross Profit	73,163	22.5%	68,718	21.8%	6%
Operating Income (Loss)	31,986	9.8%	31,846	10.1%	0%

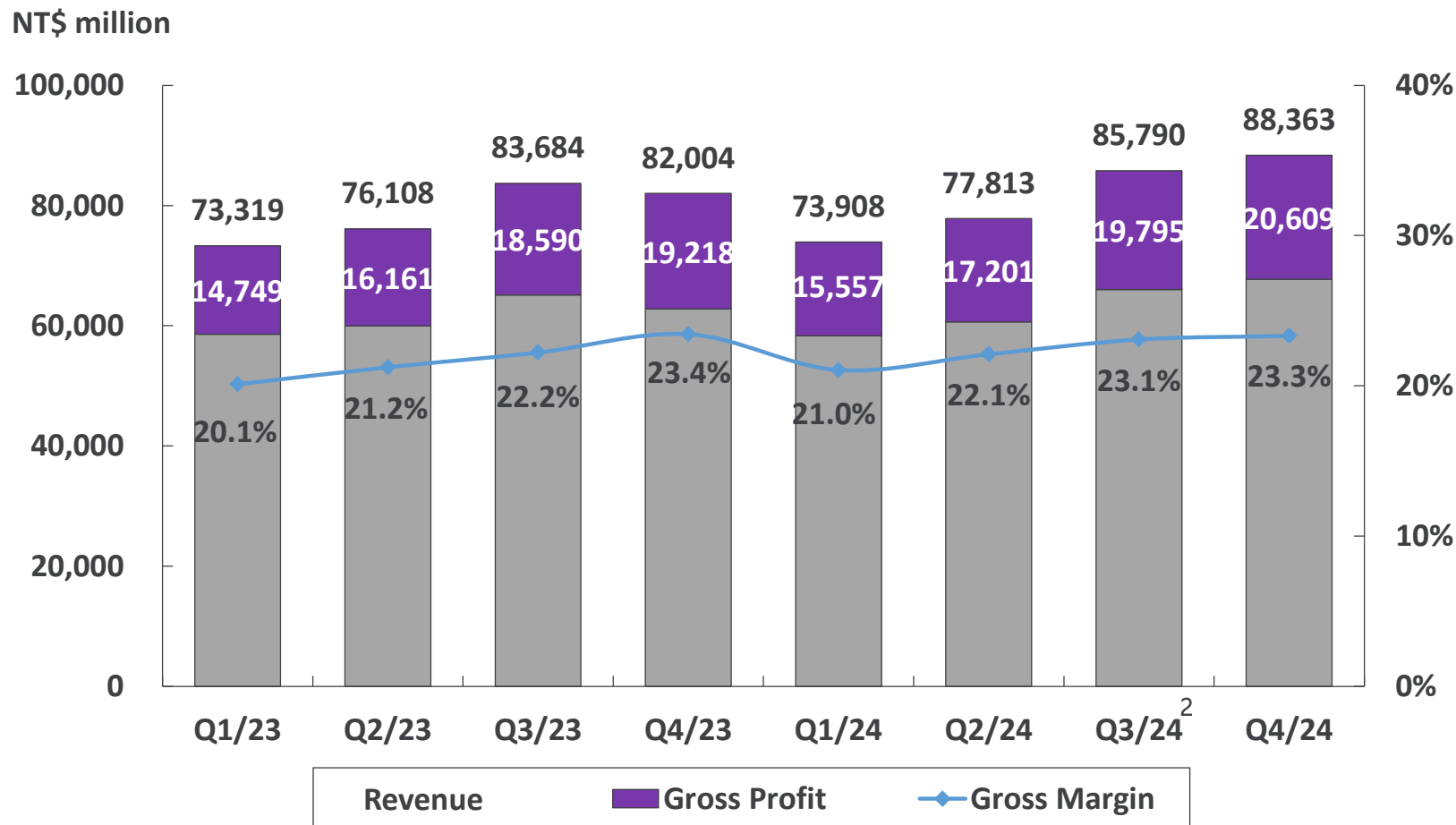
Additional Commentary From Management¹:

Gross Profit excl. PPA expenses	76,453	23.5%	72,214	22.9%	6%
Operating Profit excl. PPA expenses	36,276	11.1%	36,342	11.5%	0%

¹: We exclude depreciation, amortization, other expenses, and income tax benefit in connection with business combinations. Please refer to Appendix 1 for details.

ATM Operations

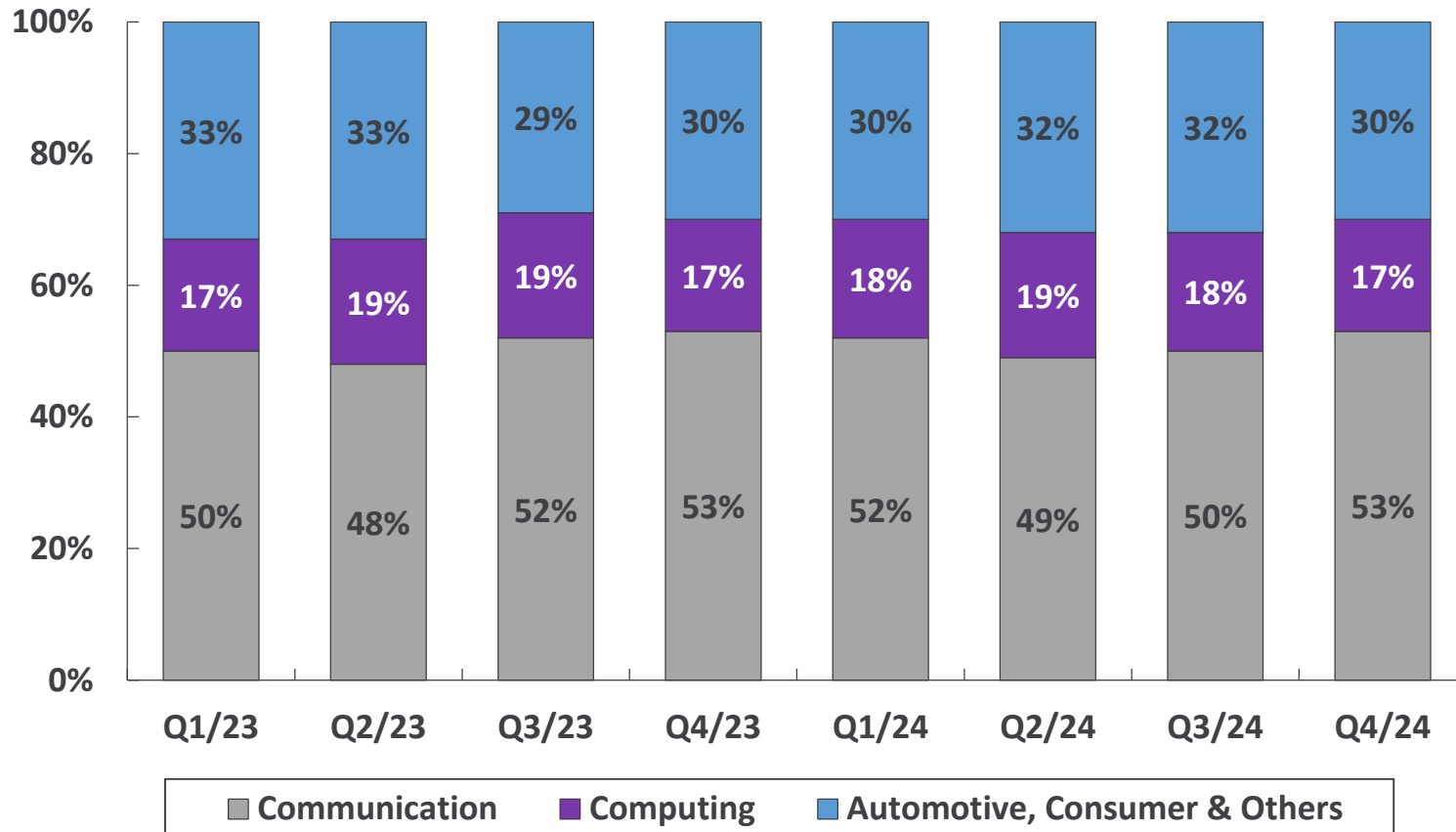
(Unaudited)



²: As of December 31, 2024, we have completed the purchase price allocation of business combination, and have retrospectively adjusted the consolidated financial results for the prior period.

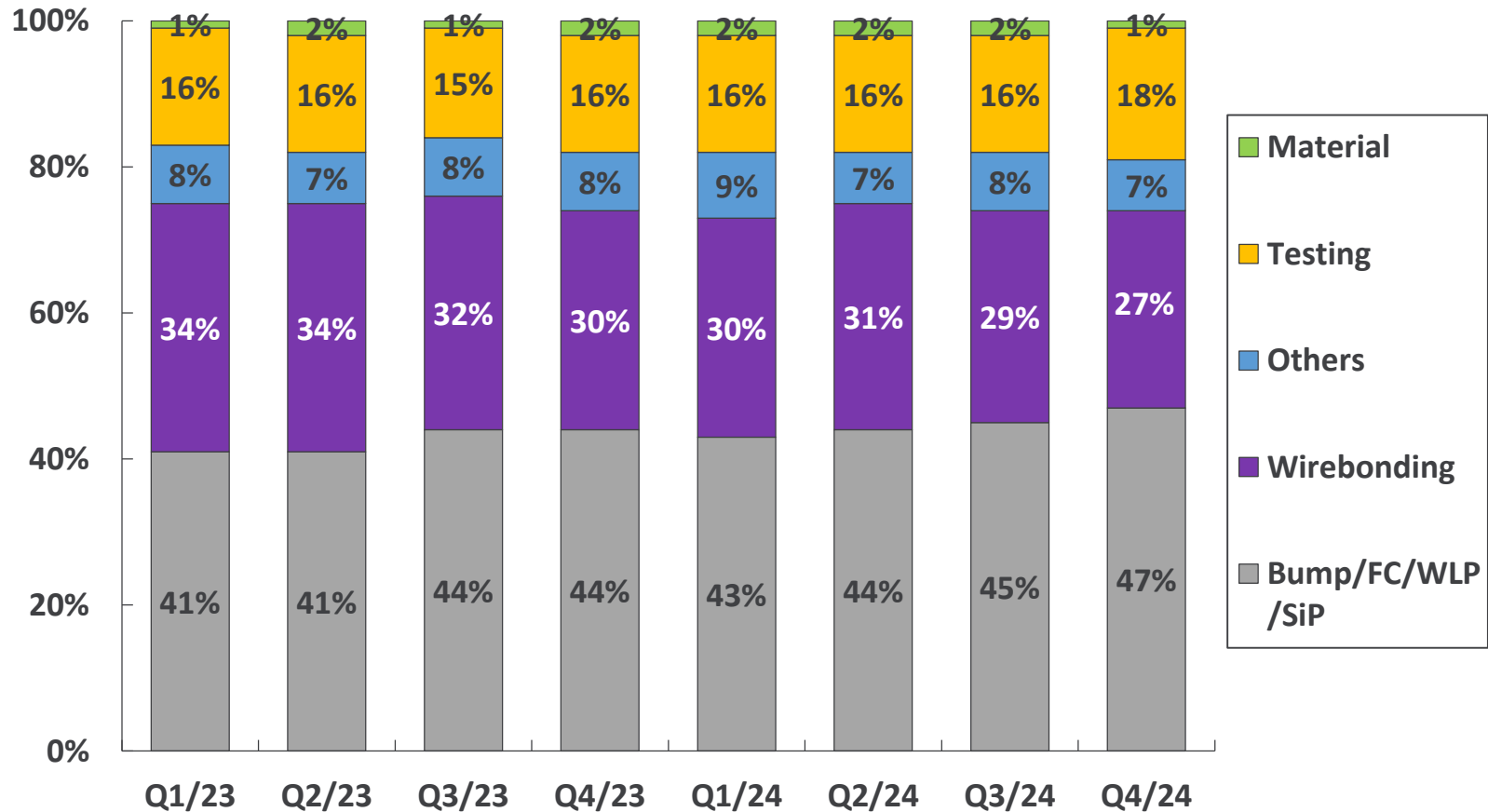
ATM Revenues by Application

(Unaudited)



ATM Revenues by Type

(Unaudited)



EMS Operations



Quarterly/Yearly Comparison

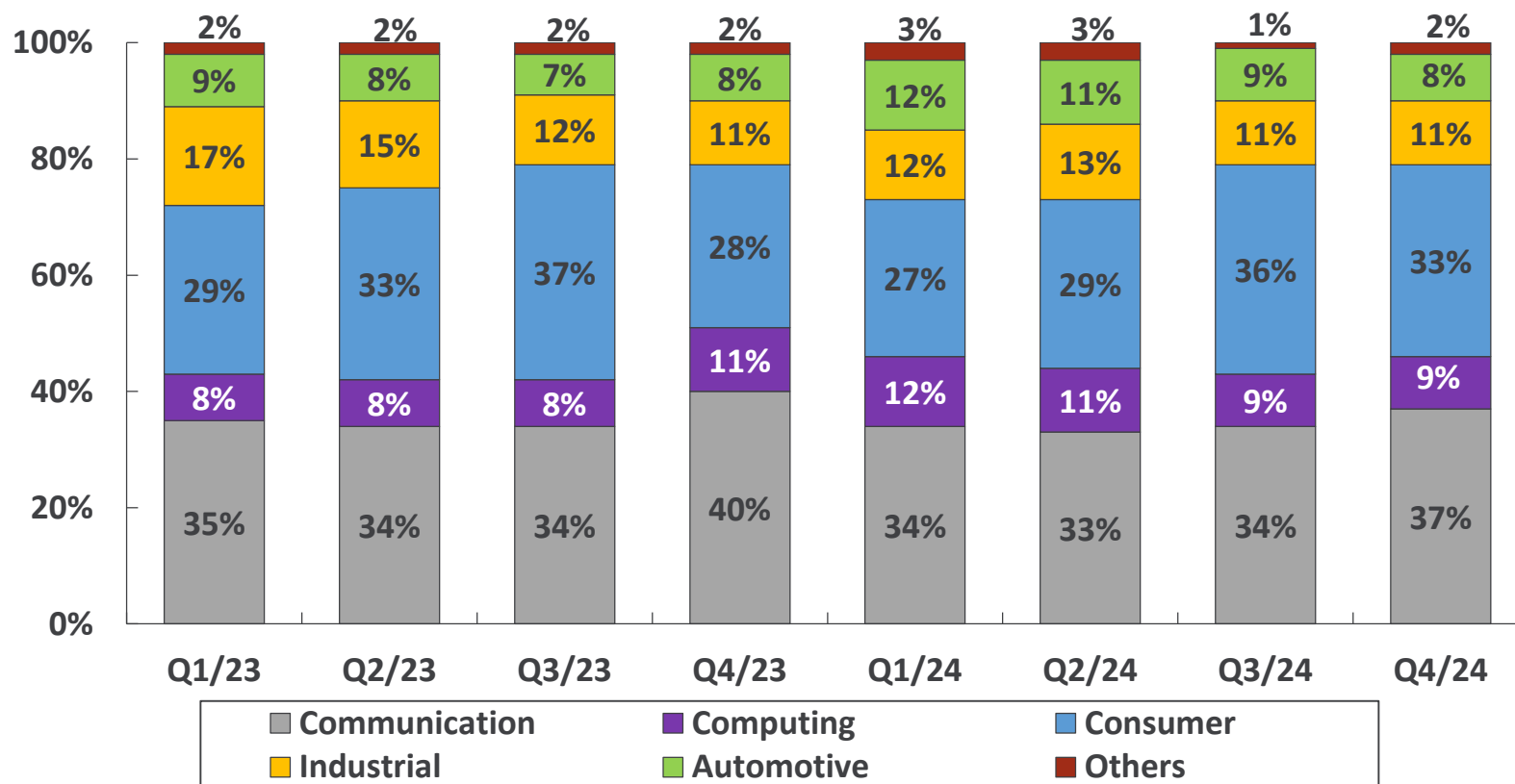
(unaudited)

(NT\$ million)	Q4 / 2024	%	Q3 / 2024	%	Q4 / 2023	%	QoQ	YoY
EMS Net Revenues	74,895	100.0%	75,384	100.0%	79,182	100.0%	-1%	-5%
Gross Profit	6,182	8.3%	6,757	9.0%	6,686	8.4%	-9%	-8%
Operating Income (Loss)	1,986	2.7%	2,453	3.3%	2,799	3.5%	-19%	-29%

(NT\$ million)	FY / 2024	%	FY / 2023	%	YoY
EMS Net Revenues	272,550	100.0%	268,309	100.0%	2%
Gross Profit	24,415	9.0%	23,362	8.7%	5%
Operating Income (Loss)	7,990	2.9%	8,980	3.3%	-11%

EMS Operations

Quarterly Revenues by Application
(unaudited)



Key Balance Sheet Items & Indices

(Unaudited)



(NT\$ million)	Dec. 31, 2024	Sept. 30, 2024 ²
Cash and cash equivalent	\$76,493	\$71,711
Financial assets - current	9,376	6,643
Financial assets - non current & investments - equity method	41,810	42,300
Property, plant & equipment	312,531	283,886
Total assets	740,698	714,648
Short-term loans & short-term bills payable	47,445	56,726
Current portion of bonds payable	14,998	18,099
Current portion of long-term loans	3,885	5,432
Bonds payable	17,978	17,073
Long-term loans	121,750	108,003
Total interest bearing debts	213,868	213,225
Total liabilities	394,911	383,538
Total equity (Including non-controlling interest)	345,787	331,110
 Quarterly EBITDA*	 28,797	 28,692
2024 Full Year EBITDA	107,555	
Current ratio	1.19	1.18
Net debt to equity ratio	0.37	0.41

²: As of December 31, 2024, we have completed the purchase price allocation of business combination, and have retrospectively adjusted the consolidated financial results for the prior period.

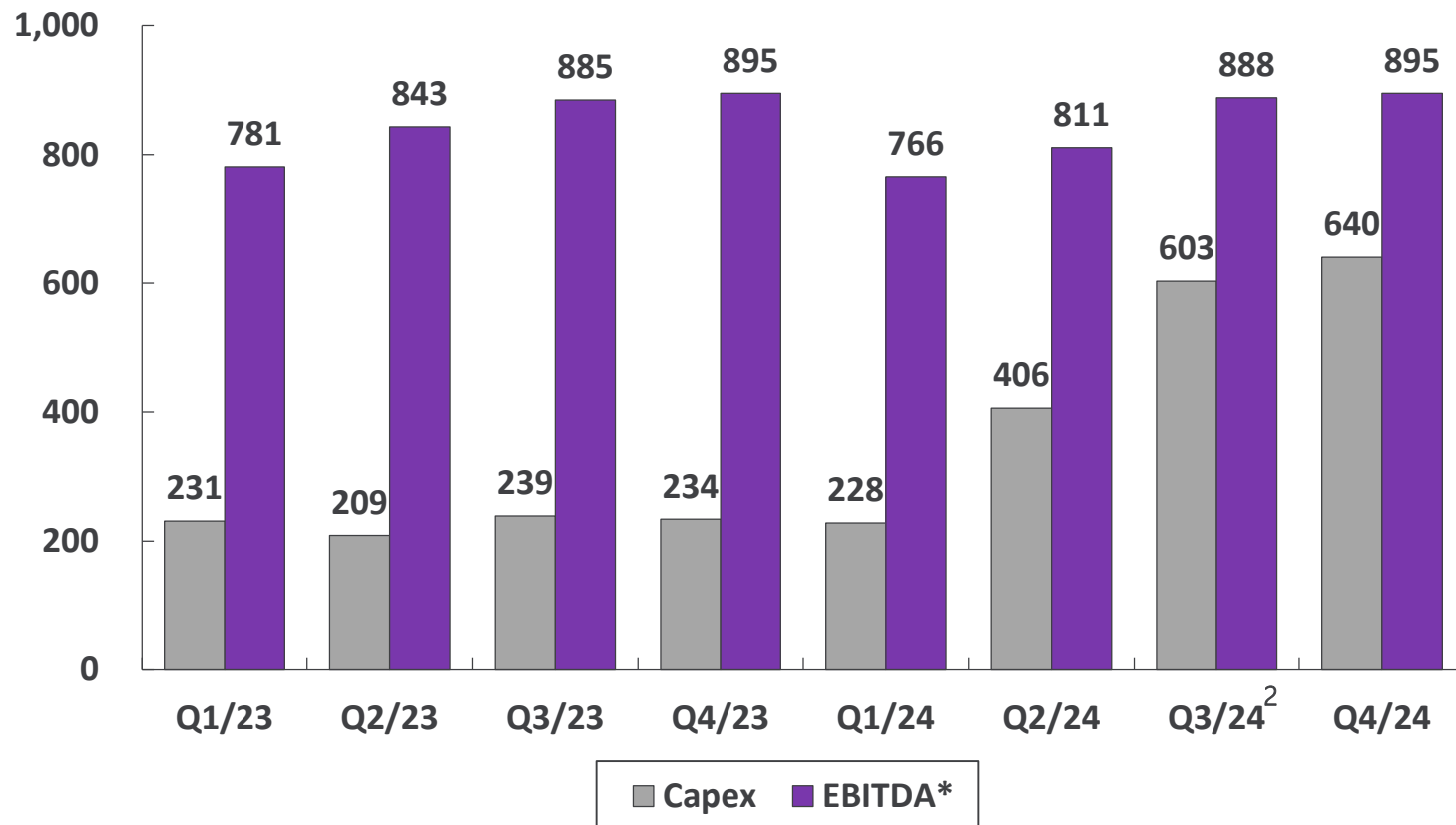
*: EBITDA stands for net income or loss before interest, taxes, depreciation, amortization, impairment and investment gain or loss as well as other items.

Equipment Capital Expenditures vs. EBITDA

(Unaudited)



US\$ million



²: As of December 31, 2024, we have completed the purchase price allocation of business combination, and have retrospectively adjusted the consolidated financial results for the prior period.

*: EBITDA stands for net income or loss before interest, taxes, depreciation, amortization, impairment and investment gain or loss as well as other items.

First Quarter 2025 Outlook



Based on our current business outlook and exchange rate assumptions, management projects overall performance for the first quarter of 2025 to be as follows:

- In NT dollar terms, our ATM 1st quarter 2025 revenues should decline by mid-single digits quarter over quarter;
- Our ATM 1st quarter gross margin should decline by slightly more than one percentage point quarter over quarter;
- In NT dollar terms, our EMS 1st quarter 2025 revenues should decline slightly year over year;
- Our EMS 1st quarter 2025 operating margin should decline by 30 basis points year over year.



Thank you

Consolidated Statements of Comprehensive Income

(Unaudited)

(NT\$ thousand)	Q1/2024 ^{3&4}	Q2/2024 ^{3&4}	Q3/2024 ^{2,3&4}	Q4/2024 ^{3&4}	FY/2024 ^{3&4}
Revenues	132,802,855	140,238,063	160,105,107	162,263,560	595,409,585
COGS	111,981,689	117,183,829	133,679,394	135,632,929	498,477,841
PPA under COGS	954,137	958,574	934,749	643,518	3,490,978
Gross profit	20,821,166	23,054,234	26,425,713	26,630,631	96,931,744
Gross profit excl. PPA	21,775,303	24,012,808	27,360,462	27,274,149	100,422,722
OPEX	13,343,693	14,045,894	14,955,682	15,420,090	57,765,359
PPA under OPEX	262,917	263,176	263,418	262,980	1,052,491
Operating income	7,477,473	9,008,340	11,470,031	11,210,541	39,166,385
Operating income excl. PPA	8,694,527	10,230,090	12,668,198	12,117,039	43,709,854
Non Op gain/(loss)	334,868	1,096,772	854,753	230,709	2,517,102
PPA under Non Op gain/ (loss)	1,027	3,670	859	11,986	17,542
Non Op gain/ (loss) excl. PPA	335,895	1,100,442	855,612	242,695	2,534,644
Pretax income	7,812,340	10,105,112	12,324,784	11,441,250	41,683,486
PPA under Pretax income	1,218,081	1,225,420	1,199,026	918,484	4,561,011
Pretax income excl. PPA	9,030,421	11,330,532	13,523,810	12,359,734	46,244,497
Tax expenses	1,893,199	1,950,137	2,052,371	1,862,138	7,757,845
PPA under Tax expense	(21,989)	(12,940)	(13,849)	(32,703)	(81,481)
Tax expense excl. PPA	1,915,188	1,963,077	2,066,220	1,894,841	7,839,326
Non-controlling interests	258,783	377,466	539,872	267,042	1,443,163
PPA under Non-controlling interests	22,278	12,036	11,339	10,933	56,586
Non-controlling interests excl. PPA	281,061	389,502	551,211	277,975	1,499,749
Net income attributable to shareholders of the parent	5,660,358	7,777,509	9,732,541	9,312,070	32,482,478
PPA expenses under Net income attributable to shareholders of the parent	1,173,814	1,200,444	1,173,838	874,848	4,422,944
Net income attributable to shareholders of the parent excl. PPA	6,834,172	8,977,953	10,906,379	10,186,918	36,905,422
Total PPA expenses	1,196,092	1,212,480	1,185,177	885,781	4,479,530
Basic EPS (NT\$)	1.31	1.80	2.25	2.15	7.52
Basic EPS (NT\$) excl. PPA	1.58	2.08	2.52	2.36	8.54
Diluted EPS (NT\$)	1.27	1.75	2.18	2.07	7.23
Diluted EPS (NT\$) excl. PPA	1.54	2.03	2.45	2.27	8.23

²: As of December 31, 2024, we have completed the purchase price allocation of business combination, and have retrospectively adjusted the consolidated financial results for the prior period.

³: PPA expenses are the P&L impacts from the accounting treatment of purchase price allocation in relation to the ASE/SPIL and ASE/Infineon transaction, which resulted in increased asset values from purchase price premiums in inventory, PP&E, intangibles, right-of-use assets, other assets, and deferred tax liability. The PPA expenses excluded are related to depreciation, amortization, other expenses, and income tax benefit \$1.13bn in 1Q24, \$1.17bn in 2Q24, 1.14bn in 3Q24, 0.85bn in 4Q24, and \$4.29bn in 2024.

⁴: PPA expenses are the P&L impacts from the accounting treatment of purchase price allocation in relation to the USI/Asteelflash and USI/Hirschmann transaction, which resulted in increased asset and liability values from purchase price premiums in inventory, PP&E, intangibles, right-of-use assets and deferred tax liability. The PPA expenses excluded are related to depreciation, amortization, other expenses and income tax benefit \$0.07bn in 1Q24, \$0.04bn in both 2Q24, 3Q24 and 4Q24, and 0.19bn in 2024.