

# **Operating Result Report for Q4 of 2024 and Year 2024**

**Mar. 6, 2025**

# Content

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- 1. Market Information**
- 2. Operating Overview for Q4 of 2024 and Year 2024**
- 3. Outlook for Dynamic**
- 4. Dynamic Actions in ESG**

# Disclaimer

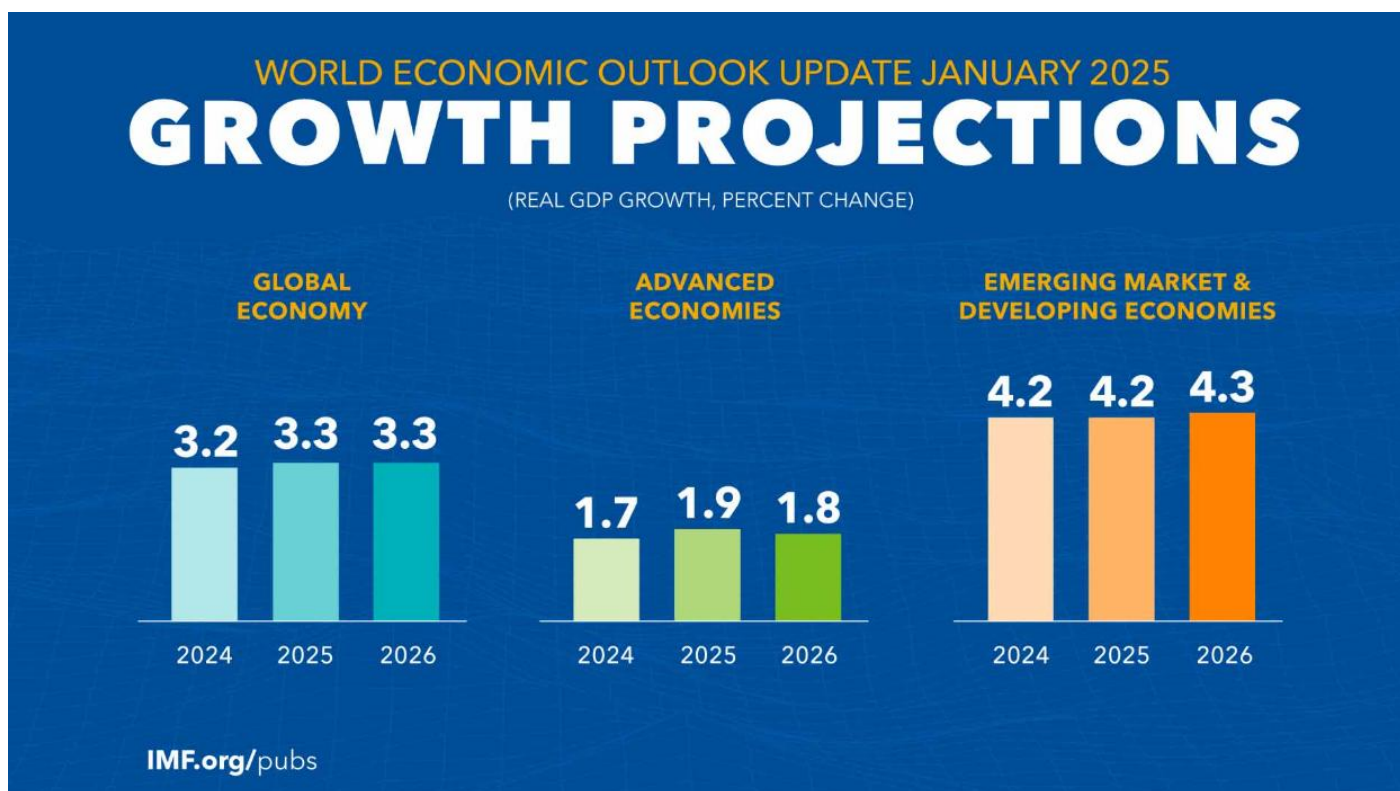
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- The forward-looking statements in this report contain unknown risks and uncertainties, which may cause actual operating results to be materially different from the forward-looking statements, the statements about historical events are excluded.
- The forward-looking statements in this report reflect the company's view of the future so far, the company is not responsible for reminding or updating on any changes or adjustments in these views in the future at any time.

# Market Information

# World Economic Outlook

According to the update of the World Economic Outlook released by the International Monetary Fund (IMF) in January 2025, global economic growth in 2024 was 3.2%, with forecasts of 3.3% for both 2025 and 2026, which is below the historical average of 3.7%. Growth varies across countries, with the U.S. accelerating, but other economies facing downside risks.



# Electronics Market in 2024 and Outlook for 2025

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## 2024 Overall Economic Challenges

- Weak demand and incomplete inventory reduction
- High inflation and high interest rates continue to impact the economic environment throughout the year
- Macroeconomic challenges in China, Europe, and Japan
- Intensified geopolitical conflicts, U.S. semiconductor technology export restrictions, and supply chain restructuring

## 2024 Electronics Market

- The electronics market is expected to grow by 4.6% in 2024, primarily driven by AI, including servers, high-performance computing (HPC), data center networks, advanced packaging, high-speed circuit boards, and low-Dk materials.
- The AI server market is experiencing explosive growth, increasing by 48%, becoming a key driver of the electronics industry.

## 2025 Outlook

- The AI server market is projected to continue expanding over the next five years, with a compound annual growth rate (CAGR) of 20.2%, serving as a major growth driver.
- PCB production capacity expansion in Southeast Asia (Thailand, Malaysia, Vietnam) will also become a crucial phase in the development of the electronics industry.

# PCB Market in 2024 and Outlook for 2025

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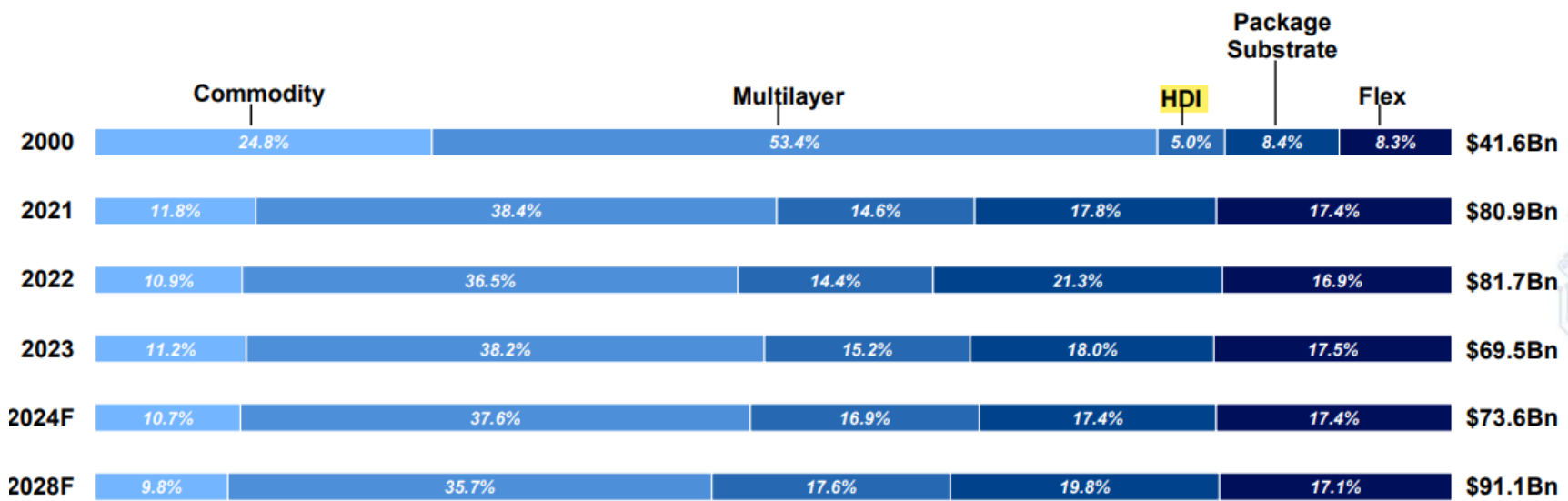
## 2024 Printed Circuit Board (PCB) Market

- The PCB market is expected to grow by 5.8% in 2024.
- Among them, multilayer boards with 18+ layers will experience the fastest growth at 25.2%. While part of this growth comes from a smaller base, it highlights the strong demand for data centers, network equipment, and AI servers.
- The high-density interconnect (HDI) board market is projected to grow 17.8%, making it the second-fastest-growing segment. This growth is primarily driven by HLC + HDI boards, widely used in AI servers, high-speed networks, satellite communications, and automotive applications, demonstrating strong growth momentum.

## 2025 Outlook

- The PCB market is expected to grow by 6.1% in 2025, with a five-year compound annual growth rate (CAGR) of 5.6%.
- Global PCB production capacity is undergoing rapid transformation:
  - China remains the world's largest production base, focusing on high-value-added products and increasing local production ratios. Industry consolidation is becoming more pronounced.
  - Southeast Asia (SEA) is rapidly emerging, covering multilayer boards, HDI, flexible boards, and substrates. Within the next few years, it is expected to become the world's second-largest production hub.
  - Japan, Taiwan, and South Korea will focus more on advanced high-value technologies, further enhancing market competitiveness and driving industry upgrades and innovation.

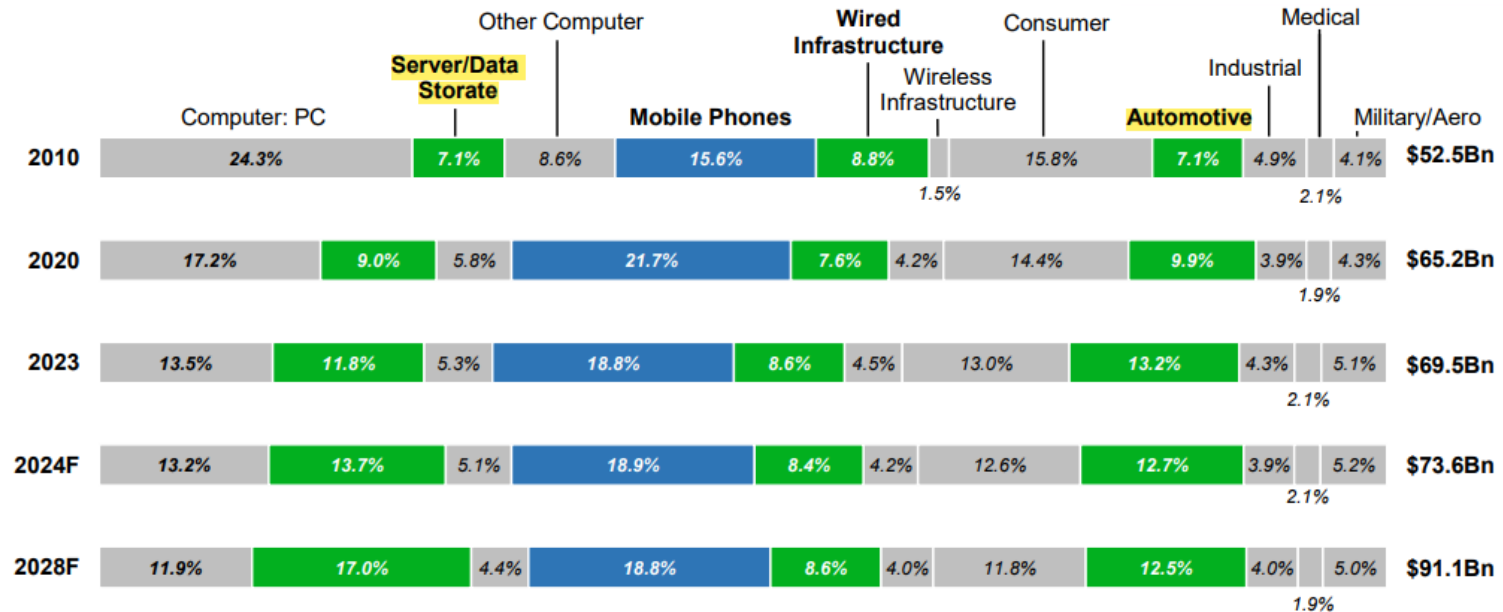
# Changes in PCB Market Product Mix



	2000	2020	2021	2022	2023/ 2022	2023	2024F	2028F	2023- 2028 CAAGR
Commodity	\$10,324	\$7,911	\$9,589	\$8,875	-12.6%	\$7,757	\$7,894	\$8,923	2.8%
Multilayer	\$22,217	\$24,763	\$31,053	\$29,846	-11.1%	\$26,534	\$27,634	\$32,483	4.1%
HDI	\$2,074	\$9,874	\$11,811	\$11,763	-10.4%	\$10,536	\$12,413	\$16,026	8.7%
Package Substrate	\$3,505	\$10,188	\$14,410	\$17,415	-28.2%	\$12,498	\$12,829	\$18,065	7.6%
Flex	\$3,450	\$12,483	\$14,058	\$13,842	-11.9%	\$12,191	\$12,795	\$15,617	5.1%
<b>TOTAL</b>	<b>\$41,570</b>	<b>\$65,219</b>	<b>\$80,920</b>	<b>\$81,740</b>	<b>-15.0%</b>	<b>\$69,517</b>	<b>\$73,565</b>	<b>\$91,113</b>	<b>5.6%</b>



# Changes in PCB Market Application Mix



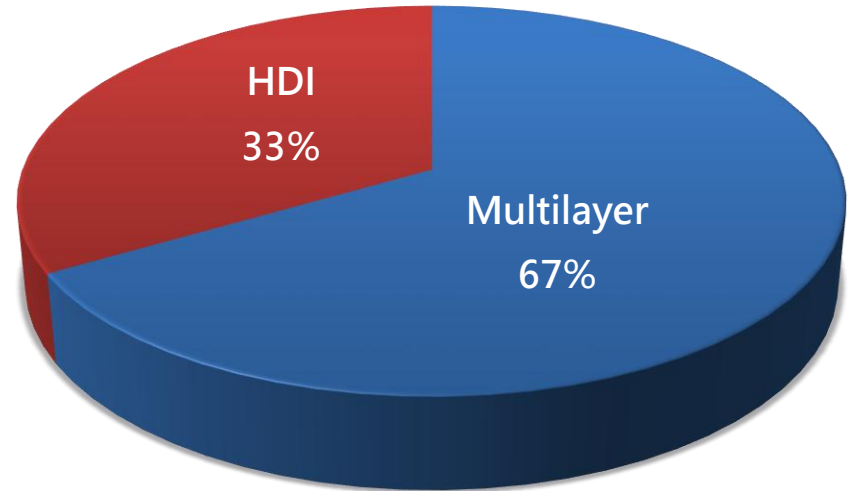
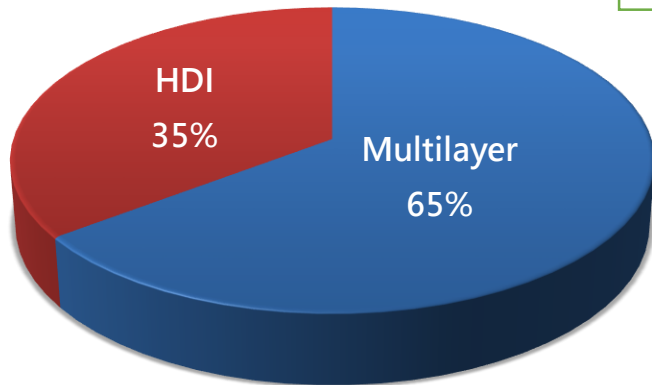
					2023-2028F
\$M	2020	2023	2024E	2028F	CAAGR
Computer: PC	\$11,210	\$9,391	\$9,690	\$10,820	2.9%
Server/Data Storage	\$5,876	\$8,201	\$10,110	\$15,512	13.6%
Other Computer	\$3,801	\$3,661	\$3,757	\$4,039	2.0%
Mobile Phones	\$14,150	\$13,085	\$13,893	\$17,135	5.5%
Wired Infrastructure	\$4,958	\$5,955	\$6,213	\$7,826	5.6%
Wireless Infrastructure	\$2,771	\$3,118	\$3,115	\$3,674	3.3%
Consumer	\$9,366	\$9,129	\$9,280	\$10,796	3.7%
Automotive	\$6,457	\$9,153	\$9,318	\$11,357	4.4%
Industrial	\$2,543	\$2,871	\$2,886	\$3,659	4.1%
Medical	\$1,263	\$1,440	\$1,512	\$1,771	4.2%
Military/Aerospace	\$2,824	\$3,514	\$3,791	\$4,524	5.2%
<b>Total</b>	<b>\$65,218</b>	<b>\$69,517</b>	<b>\$73,565</b>	<b>\$91,113</b>	<b>5.6%</b>

# Operating Overview for Q4 of 2024 and Year 2024

# 2024Q4 Sales Analysis - Technology

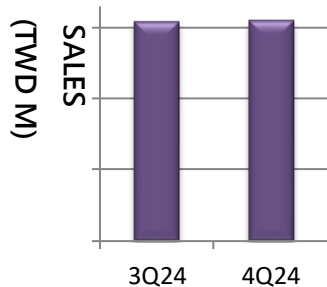
Q4

Q3



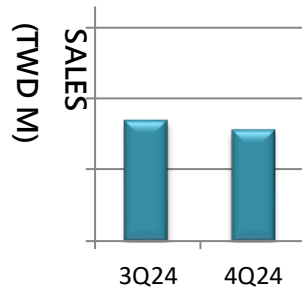
## Multilayer

Change+ 1%

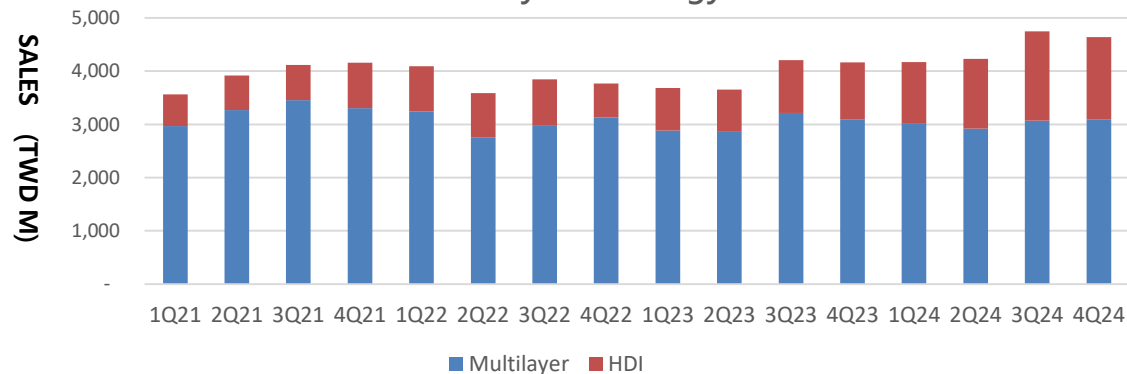


## HDI

Change- 7%



## Revenue by Technology



# Consolidated Income Statement

Accounts (TWD 100M)	4Q24	3Q24	Q-o-Q Change%	4Q23	Y-o-Y Change%	Q1-Q4 2024	Q1-Q4 2023	Y-o-Y Change%
Sales Revenue	46.40	47.48	(2.3)%	41.66	11.4 %	177.87	157.14	13.2 %
<b>Gross Profit %</b>	<b>18.8 %</b>	<b>23.8 %</b>	<b>(5.0)%</b>	<b>28.7 %</b>	<b>(9.9)%</b>	<b>23.1 %</b>	<b>24.1 %</b>	<b>(1.0)% ppts</b>
Operating expenses	7.34	6.76	8.6 %	6.36	15.3 %	25.73	21.44	20.0 %
<b>Operating Income%</b>	<b>3.0 %</b>	<b>9.6 %</b>	<b>(6.6)%</b>	<b>13.4 %</b>	<b>(10.4)%</b>	<b>8.6 %</b>	<b>10.4 %</b>	<b>(1.8)% ppts</b>
Non-operating income/expenses	1.10	(0.78)	241.4 %	(1.82)	160.5 %	0.30	(1.76)	117.3 %
Net Income (loss)	1.71	2.57	(33.8)%	2.52	(32.4)%	10.51	10.03	4.7 %
<b>Net Income (loss)%</b>	<b>3.7 %</b>	<b>5.4 %</b>	<b>(1.7)%</b>	<b>6.1 %</b>	<b>(2.4)%</b>	<b>5.9%</b>	<b>6.4 %</b>	<b>(0.5)% ppts</b>
EPS(NTD)	0.61	0.93	(34.4)%	0.90	(32.2)%	3.78	3.61	4.7 %
ROE (%)	8.4 %	13.0 %	(4.6)%	14.6 %	(6.2)%	13.0 %	14.5 %	(1.5)% ppts
Average exchange	32.11	32.03	0.2 %	31.16	3.1 %	32.11	31.16	3.1 %

\* The weighted average thousand shares to 277,675 of ordinary shares outstanding during the fourth quarter of 2024.

\*\* The ROE is the annualized data calculated by the average equity of the parent company.

# Consolidated BS & Important Financial Indicator

Accounts (TWD 100M)	4Q24		3Q24		4Q23	
	Amount	%	Amount	%	Amount	%
Cash and cash equivalents	28.49	9.2%	38.06	13.6%	33.75	15.0%
Accounts receivable	52.53	17.0%	49.62	17.7%	44.49	19.8%
Inventories	32.27	10.4%	29.23	10.4%	22.60	10.1%
Property, plant and equipment	176.04	57.0%	146.99	52.4%	109.17	48.7%
<b>Total Assets</b>	<b>309.02</b>	<b>100.0%</b>	<b>280.66</b>	<b>100.0%</b>	<b>224.39</b>	<b>100.0%</b>
Current liabilities	175.71	56.9%	151.45	54.0%	100.06	44.6%
Long-term loans	35.62	11.5%	33.43	11.9%	41.29	18.4%
<b>Total liabilities</b>	<b>228.22</b>	<b>73.9%</b>	<b>201.42</b>	<b>71.8%</b>	<b>155.32</b>	<b>69.2%</b>
<b>Total equity</b>	<b>80.80</b>	<b>26.1%</b>	<b>79.24</b>	<b>28.2%</b>	<b>69.07</b>	<b>30.8%</b>
<b>Important Financial Indicator</b>						
A/R turnover days	108		106		107	
Average inventory turnover days	77		75		80	
Current ratio (Times)	0.7		0.8		1.1	
Asset productivity (Times)	0.7		0.8		0.7	

Ps. Asset productivity= Sales Revenue/ Average total Assets.

# Consolidated Statements Of Cash Flows

(TWD 100M)	4Q24	3Q24	4Q23
Cash at beginning of period	38.06	43.28	32.04
Cash Flow from Operating	0.09	6.87	12.65
Capital Expenditure	(8.41)	(11.92)	(12.53)
Cash Dividends Paid	0.00	(4.17)	0.00
Cash Flow from Financing	(0.52)	1.58	(1.01)
Investment & Other	(0.40)	2.17	0.16
Cash at end of period	28.49	38.06	33.75
Free Cash Flow	(8.32)	(5.04)	0.12

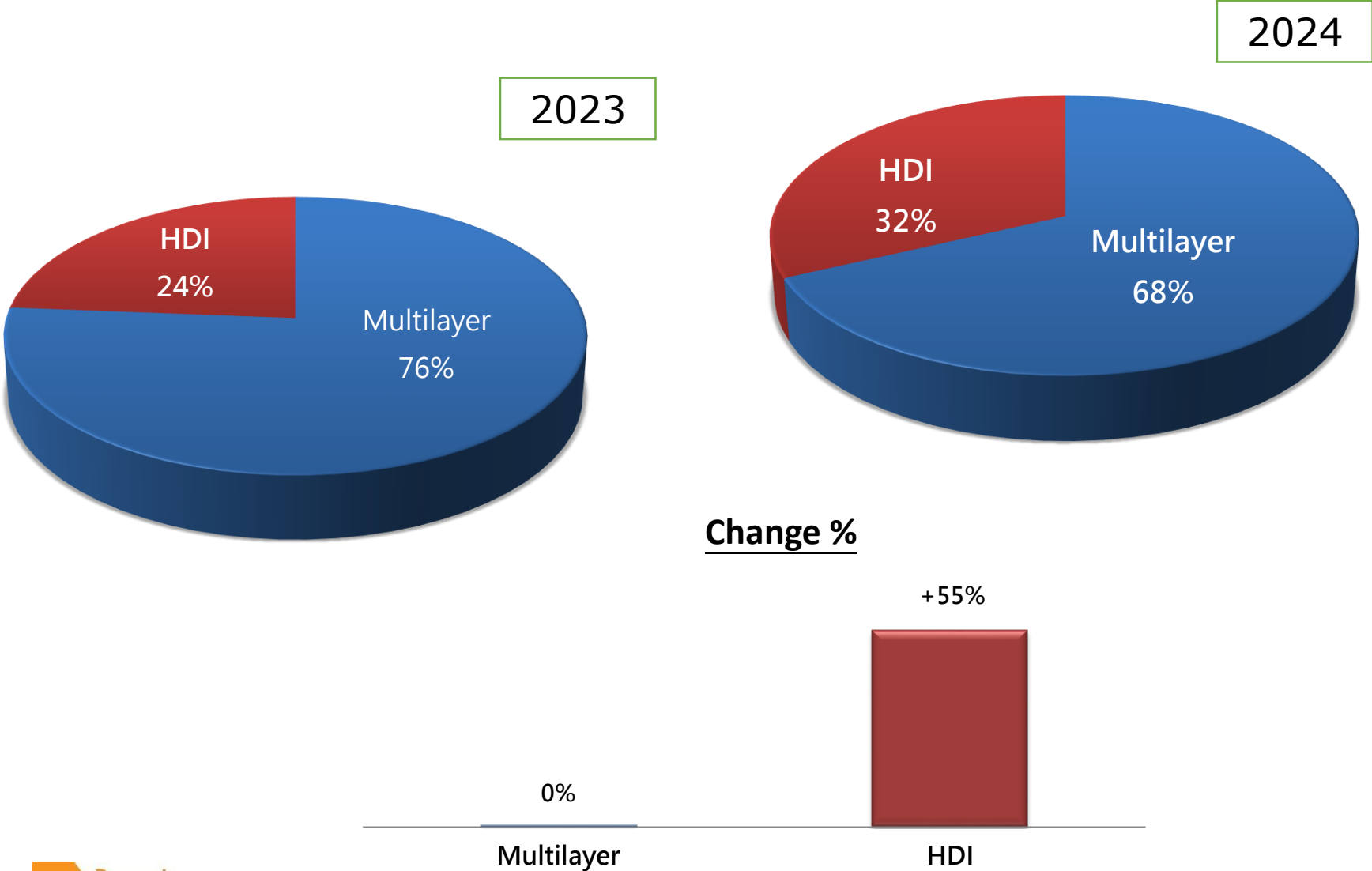
Ps. Free Cash Flow = Cash Flow from Operating - Capital Expenditure

# 2024Q4 Summary

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- By product category: The share of automotive boards increased from 66% in the previous quarter to 68% in Q4, though the total revenue remained largely unchanged. The network communications and server segment declined by 2 percentage points, mainly due to some customers postponing shipments to January 2025. Other product categories maintained their respective shares.
- By technology category: The share of HDI boards decreased from 35% in the previous quarter to 33%, primarily due to adjustments in demand from automotive and network communications & server customers.
- Q4 revenue declined by 2.3% compared to the previous quarter, impacted by customer holiday schedules at year-end. Gross margin dropped by 5 percentage points, mainly due to the initial production costs at the Thailand plant (impact of approximately 3–4 percentage points) and changes in the product mix.
- Operating expenses increased by 8.6%, primarily driven by higher R&D personnel costs at the Huangshi and Thailand plants.
- Non-operating income was NT\$110 million, including: Foreign exchange gains of approximately NT\$160 million, Interest expenses of approximately NT\$110 million, Other income of approximately NT\$70 million.
- Net profit after tax was NT\$171 million, with earnings per share (EPS) of NT\$0.61.

# 2024 Sales Analysis - Technology





# Consolidated Income Statement and Statement of Cash Flow

Account (TWD 100M)	2024	2023	Y-o-Y Change%
Sales Revenue	177.87	157.14	13.2 %
Gross Profit %	23.1 %	24.1 %	(1.0)% pts
Operating Income%	8.6 %	10.4 %	(1.8)% pts
Net Income (loss)	10.51	10.03	4.7 %
EPS(NTD)	3.78	3.61	4.7 %
Cash Flow from Operating	17.01	30.60	(44.4)%
Capital Expenditure	(51.97)	(30.84)	68.5 %
Free Cash Flow	(34.96)	(0.24)	14,711.2 %
Cash Dividends Paid	(4.17)	(2.22)	87.6 %
Cash and cash equivalents	28.49	33.75	(15.6)%
ROE (%)	13.0 %	14.5 %	(1.5)% pts

# 2024 Summary

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- In 2024, Dynamic delivered an outstanding performance in product applications, particularly in the network communications and server sector. Driven by strong market demand and growth from major customers, revenue surged 82%, with its share increasing by 2 percentage points, demonstrating strong growth momentum. Additionally, The rise of AI PCs boosted computer and peripheral business revenue by 52%. The surge in data center demand drove storage device revenue up by 25%. Automotive business revenue saw a steady increase of 10%.
- From a technological perspective, the booming HDI market contributed to an impressive 55% revenue growth in HDI, increasing its share from 24% to 32%. This optimized the product mix and highlighted the company's strong technical capabilities.
- In 2024, Dynamic achieved total annual revenue of NT\$17.8 billion, marking a 13.2% year-over-year increase. Due to the impact of the Thailand plant's transition from construction to mass production, gross margin declined slightly by 1 percentage point to 23.1%. Operating profit margin decreased by 1.8 percentage points to 8.6%. Net profit for the year reached NT\$1.051 billion, up 4.7%, with earnings per share (EPS) of NT\$3.78, demonstrating solid profitability.

# Outlook for Dynamic

# Future Outlook

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- Regarding 2025 Outlook, in Q1 2025, revenue is expected to remain stable compared to the previous quarter. However, with the continued production ramp-up at the Thailand plant, a steeper learning curve, and the mass production of high-end new products in the second half of the year, we maintain an optimistic outlook for full-year revenue and profitability.
- In 2025, network communications & servers, storage devices, and automotive businesses will be the key growth drivers: Network communications & servers will see the strongest growth; Storage devices will maintain steady expansion; Automotive business will grow at a moderate pace.
- The construction of our Thailand plant is a remarkable industry milestone—we completed it at “light speed,” from groundbreaking to production in just one year, setting a new record! Since mass production began last year, we have faced unprecedented challenges, yet we continue to enhance yield rates, quality, and revenue, fully committed to achieving our profitability targets. The Thailand plant specializes in high-end multilayer boards and advanced HDI technologies, supporting GPU, ASIC, servers, switches, satellites, and automotive applications. Our goal is to earn the trust and orders of top-tier global customers, establishing the Thailand plant as the largest, most technologically advanced, and ESG-mature high-end PCB manufacturing hub in Thailand, further strengthening our long-term sustainable growth!

# Dynamic Actions in ESG

# Dynamic in the S&P Global Sustainability Yearbook 2025

With its steadfast commitment to sustainability and transparent communication of progress, Dynamic has distinguished itself in the industry and successfully been included in the S&P Global Sustainability Yearbook 2025.

In the Electronic Equipment, Instruments & Components category, 233 companies were assessed, yet only 19 companies were selected. This prestigious recognition is not only a strong endorsement of Dynamic's sustainability efforts but also a powerful motivation for continued progress.



# Dynamic won 2024 TCSA Taiwan Corporate Sustainability Award



Dynamic has been honored with the "2024 17th TCSA Taiwan Corporate Sustainability Award", receiving:

- Outstanding Performance in Corporate Sustainability – Taiwan Sustainable Enterprise Award
- Silver Award in Sustainability Reporting – Category 1 for the Electronics & Information Manufacturing Industry



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# Awards



Dynamic won the 2024 Outstanding Supply Chain Award from Continental AG



Dynamic won the 2024 Outstanding Supplier Award from LG Innotek



Kunshan won the 2024 Excellent Supplier Award from Hitachi Chemical Light & Lighting



Dynamic was awarded the PEEP Project Special Contribution Award by AMD



Dynamic won the National Green Supply Chain Management Enterprise title



Dynamic is the Multi-Layer High-End HDI Board Industry-Academia Joint Innovation Center



Dynamic won as a "Green Label Enterprise" by the Hubei Province Ecology and Environment Dept.








Dynamic won the Hubei May Day Labor Award



# Environmental Sustainability

				
	<b>Solar Power Generation Phase 2</b>	<b>Bio-treatment of wastewater</b>	<b>Bio-treatment of Waste Gas</b>	
<b>Complete management system</b>	<b>Adaptation strategies to climate change</b>	<b>Strengthening water resources management</b>	<b>Eco-friendly practices</b>	<b>Promoting circular economy</b>
<ol style="list-style-type: none"> <li>1. Certified in ISO 14001, 45001, QC 080000, ISO 50001, RBA, as well as ISO 14064 Scope 1, 2, and 3 GHG inventory audits, while continuously maintaining the effectiveness of related systems.</li> <li>2. Huangshi has obtained UL 2799 Zero Waste to Landfill (Platinum Level), while Kunshan has been certified under the AWS (Alliance for Water Stewardship) sustainable water management standard.</li> <li>3. Recognized as a national-level "Green Factory" and "Green Supply Chain" and honored as a "Green Label Enterprise" by Hubei Ecology and Environment Dept.</li> <li>4. Completed ISO 14067 PCF assessment, establishing a Dynamic PCF tracking system, enabling carbon footprint calculations for each production part number, and promoting supply chain PCF tracking.</li> </ol>	<ol style="list-style-type: none"> <li>1. Actively participating in the Carbon Disclosure Project (CDP) since 2020.</li> <li>2. Engaged in the Science-Based Targets initiative (SBTi), currently in the target review phase.</li> <li>3. In 2024, Huangshi plant generated 2.2 million kWh of solar power and purchased around 91.48 million kWh of green electricity, achieving a 34.42% green energy usage rate. The company will continue promoting green energy transformation toward a more sustainable future.</li> <li>4. Solar-powered streetlights have been fully implemented in roadways and residential areas, with an estimated annual electricity savings of 25,000 kWh.</li> <li>5. Energy online monitoring systems have been deployed to track real-time energy consumption in the factory.</li> </ol>	<ol style="list-style-type: none"> <li>1. The reclaimed wastewater reuse system saves 162,000 tons of tap water annually.</li> <li>2. A rooftop rainwater collection system has been installed in the plant, collecting air conditioning condensate for landscaping use, saving 3,600 tons of tap water annually.</li> <li>3. The biochemical system pipelines of Huangshi Plant P1 and P2 have been connected, optimizing biochemical treatment capacity and wastewater treatment quality.</li> </ol>	<ol style="list-style-type: none"> <li>1. Established a wastewater plant fugitive emissions collection and treatment system to prevent odor dispersion and minimize impact on neighboring residents.</li> <li>2. Entrusted qualified third-party contractors to conduct: monthly wastewater testing, quarterly air emissions testing, and annual soil testing.</li> </ol>	<ol style="list-style-type: none"> <li>1. Established a Circular Economy Industry Research Center for waste recycling and reduction, including material recycling such as copper and gold recovery.</li> <li>2. Recycling projects include: copper ball recycling, tin stripping waste liquid recovery and reuse, electroplating wire activated palladium recovery, gold recovery through electrolysis of aged gold plating solution, copper stripping from plating panels, sludge drying and weight reduction.</li> <li>3. In 2024, the company reduced waste by 32,136 tons and used 1,518 tons of recycled copper balls.</li> </ol>

# Caring for All Employees of Dynamic

Taoyuan Operating Center	Kunshan Plant	Huangshi Plant
  <p>Dynamic employees participated in the "Industrial AI Talent Training" program and were recognized as a model enterprise upon completion. The company was invited to share its experience, discussing the challenges and achievements of the program, helping attendees gain a clearer understanding of its practical benefits, and inspiring more enterprises to join the journey of smart upgrading.</p> <p>Healthy meal boxes cooked with olive oil continue to be provided to maintain employees' well-being, along with various festive employee dining events.</p>	  <p>Organizing team-building activities to enhance team cohesion, promote communication and collaboration, strengthen employees' sense of belonging and recognition, and foster a positive corporate culture.</p> <p>Employee Holiday and Recreation Activities: Monthly birthday parties, Spring Festival events, etc.</p> <p>Club Activities Flourishing: Swimming Club, Basketball Club, Yoga Club, etc.</p>	  <p>Employee Holiday and Recreation Activities: Monthly birthday parties, Spring Festival events, etc.</p> <p>Club Activities Flourishing: Joy Running Club, Basketball Club, Yoga Club, etc.</p> <p>Promoting the learning, growth, and progress of employees by organizing internal instructor training sessions. Additionally, expressing gratitude to internal instructors during Teacher's Day through public appreciation activities.</p> <p>Year-end Outstanding Employee Awards to recognize exceptional employees, boost morale, and inspire the enthusiasm and teamwork of all staff members.</p>

# Social Care – Education & Charity

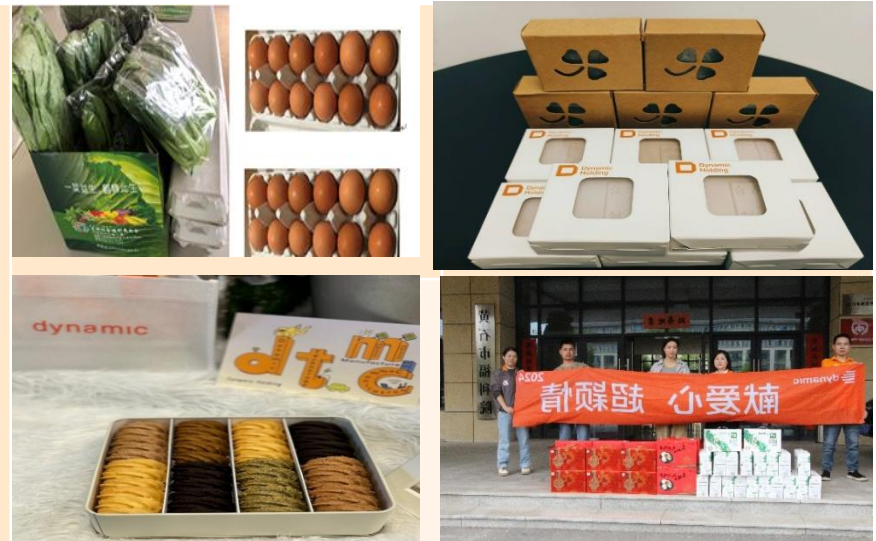
## Education



Donating to the Hubei University of Science and Technology Education Fund, supporting educational causes, and establishing a dedicated fund account for the Dynamic Project Fund and key technological research and applications for the resource utilization of metal waste liquids in the electronics industry. Additionally, donating a scholarship to the School of Chemical Engineering at Hubei University of Science and Technology.

On the eve of Children's Day (June 1st), teachers and students at Huangjinshan Third Primary School in Huangshi Open Railway District received a special gift: Dynamic donated 18 computers to the school for teachers' use, improving the teaching conditions at the school.

## Charity



Employee Mid-Autumn Festival gifts support local employment for individuals with physical and mental disabilities by selecting products from the Taoyuan City Beautiful Sheltered Workshop (organic eggs and organic vegetables) and handmade, additive-free cookies made by single mothers.

The commemorative gifts for the shareholders' meeting were handcrafted soaps from the Little Lamb Shelter Workshop and the Taoyuan City Autism Association.

Employees from Huangshi visited the Huangshi Welfare Institute during the Dragon Boat Festival, delivering warmth to orphaned and disabled children, as well as elderly residents.

**Q&A**