

# AMPLE Electronic Technology Co., LTD 2024

**Investor Meeting** 

2024/11/13



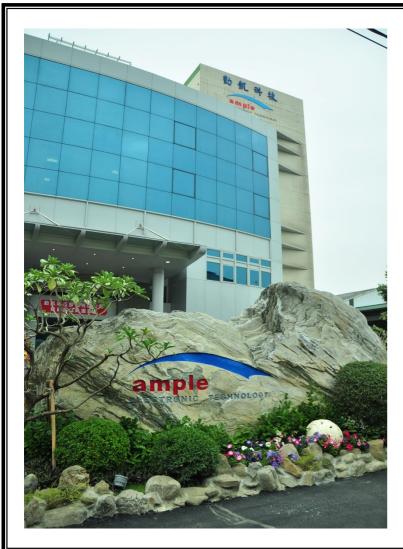


#### Disclaimer

- > The presentation and discussion contain certain forward-looking statements with respect to the results of operation, financial condition and current expectation.
- The forward-looking statements are subject to known and unknown uncertainties and risks that could cause actual results to differ materially from those expressed or implied by such statements. Such risks and uncertainties include but are not limited to the impact of competitive products and pricing, timely project acceptance by our customers, timely introduction of new technologies, ability to ramp new needs into products, financial stability in end markets, and other risks that AMPLE can not control.
- The forward-looking statements in this release reflect the current belief of AMPLE as of the date of this release and AMPLE undertakes no obligation to update these forward-looking statements for events or circumstances that occur subsequent to such date.



#### Introduction

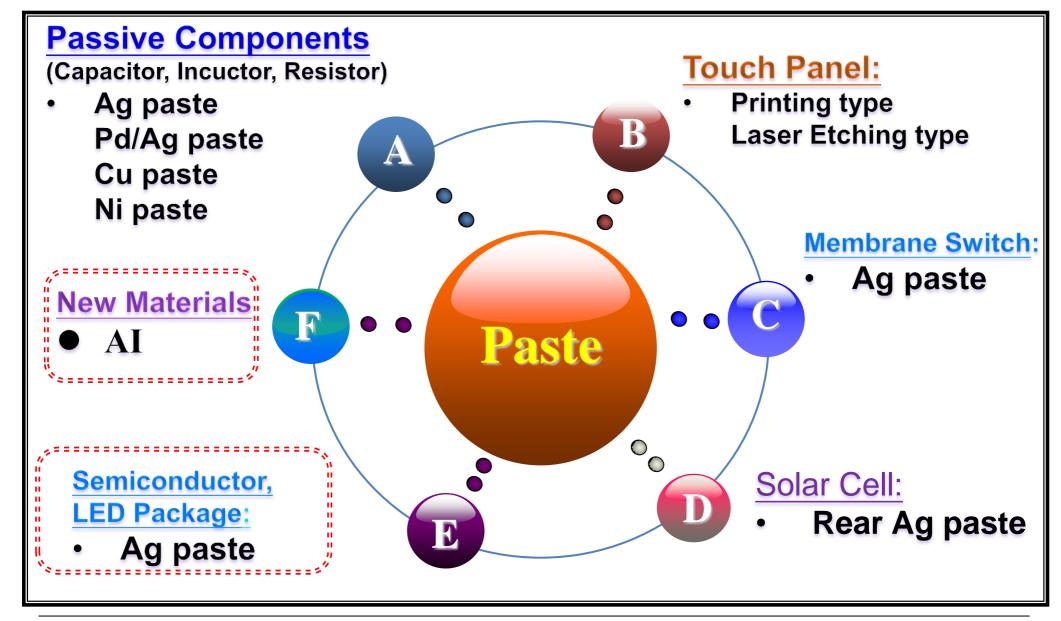


- Established: June 8, 2007
- ➤ Capital: ~ NTD \$ 321 Million
- Main Products : Customized Conductive Paste (Cu paste & Ag paste)
- ➤ Location :
  No.32, Dayou 3<sup>rd</sup> St., Daliao Dist,
  Kaohsiung City, Taiwan



#### **Applications of Conductive paste**







#### New products and Future applications

# Consumer electronics&Automotive electronics Incuctor

High temperature internal/external electrodes

Low temperature external electrode

Photolithography silver

#### **Capacitor**

High voltage productsResistor

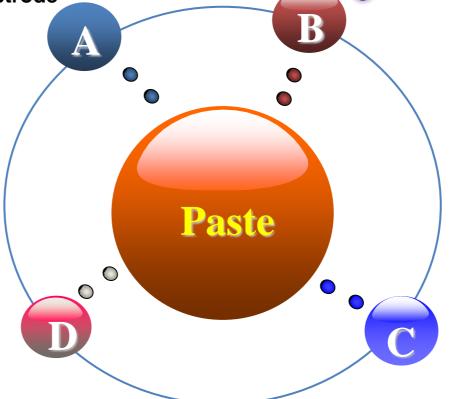
Base metal material

#### **IC/**Semiconductor

High power IC

Energy Storage System (BMS/PCS)

Passive components



A





#### **ENTRY BARRIER**

# AMPLE top R&D team and manufacturing capability to create products that meet customer needs

Simulate customer product lines and complete inspection processes and provide the **Best Quality** 

Advanced **Manufacturing** Technology Capability

Intensive discussions with customers and complete testing after sample delivery

Advanced R&D capability helps design of customer's products

**Grasp our customers** 



AMPLE is the leader in the market.

Our formulation development and product customization capabilities raise the entry barrisrs



#### Core Technology

Powder design technology

**Surface treatment** 

Particle dispersion

Mixing technology

Organic design technology

**Customization Core technology** 

Mass production technology

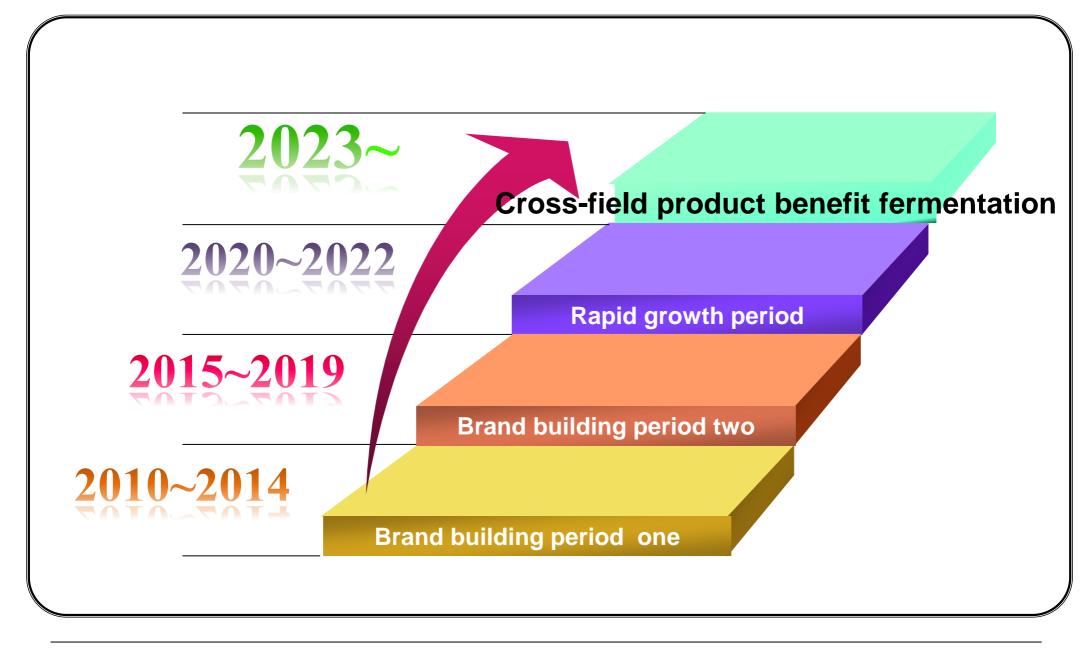
Organic · Inorganic

Cooperate with technology

Evaluate · Analyze technology



### Brand growth curve of materials industry





## Product Introduction





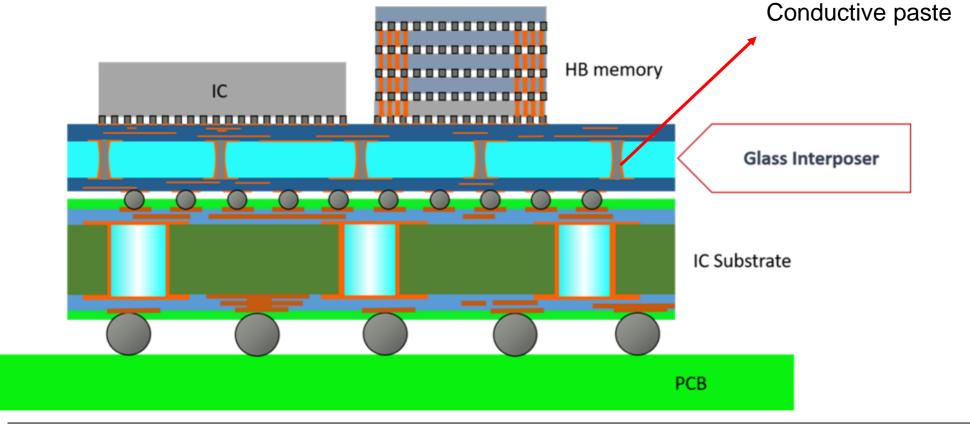




## **Application category (TGV)**

#### **TGV(Through Glass Via)**

The original silicon in the interposer is replaced with glass, and TGV technology forms conductive channels on the glass substrate to connect multi-layer circuits. The advantages of using glass substrate include low cost, good dielectric properties, transparency, high rigidity, CTE similar to silicon.



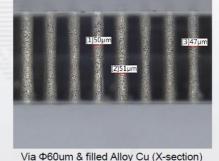


#### **Application category (TGV-performance)**

Diameter: 60 um Aspect ratio: 1:8.3

➤ Hole filling& glass adhesion:Pass

(9)100pm (15)100pm (15)100

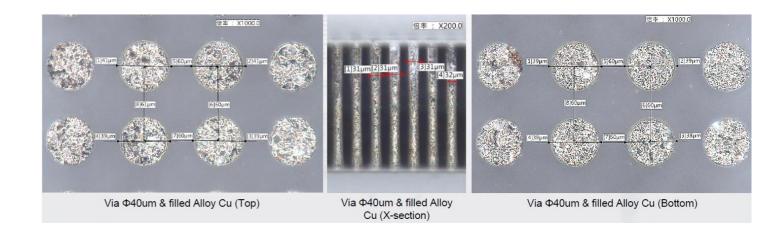




Diameter: 40 um

Aspect ratio: 1:12.5

➤ Hole filling& glass adhesion:Pass



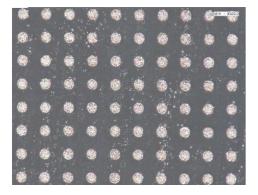


#### **Application category (TGV-performance)**

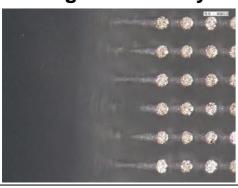


Glass thickness	Diameter (Avg.)	Middle diameter (Avg.)	Aspect ratio	Result	
470 um	30 um	18 um	1:15.7	Hole filling: Pass	

#### **TOP**



#### 30 degrees laterally



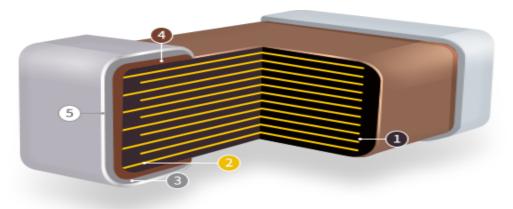
	TGV Conductive Filler Paste
Advantages	<ul> <li>◆ Excellent glass adhesion</li> <li>◆ Low void ratio</li> <li>◆ No CMP process</li> <li>◆ High aspect ratio ( &gt; 1 : 12)</li> <li>◆ Low CTE</li> <li>◆ High thermal conductivity</li> <li>◆ Excellent volume resistance(5.0E-5 ~ 6.0E-6)</li> <li>◆ Customization (Viscosity / Volume resistivity / TGV Diameter)</li> </ul>





## **Application for Passive Components**

#### **MLCC** Capacitor



Body Material - Ceramic Material for High Marking Frequency Conductor Material External Electrode - Ag Termination - Ni + Sn Plating **MLCI** Chip Inductor

Ceramic body 2 Electrode(Ni/Cu\*) Plating(Ni) Termination (Cu or Cu+Metal Epoxy) ⑤ Plating(Sn) \* Internal Cu electrode is only applied to limited products.

#### Chip Resistor



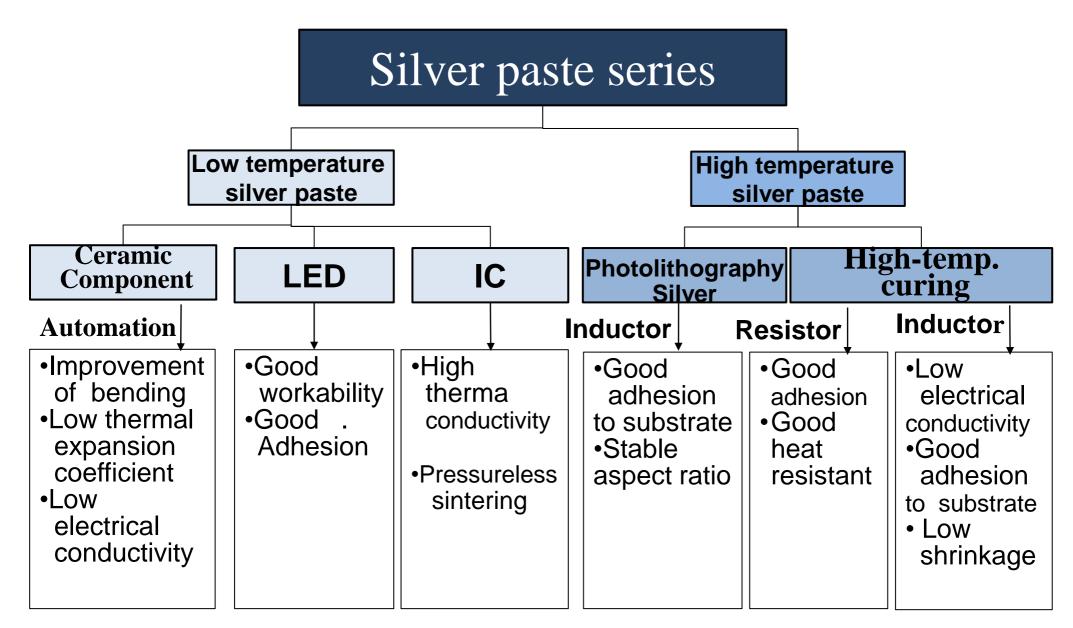


#### **Application for Semi-conductor**





### Application category





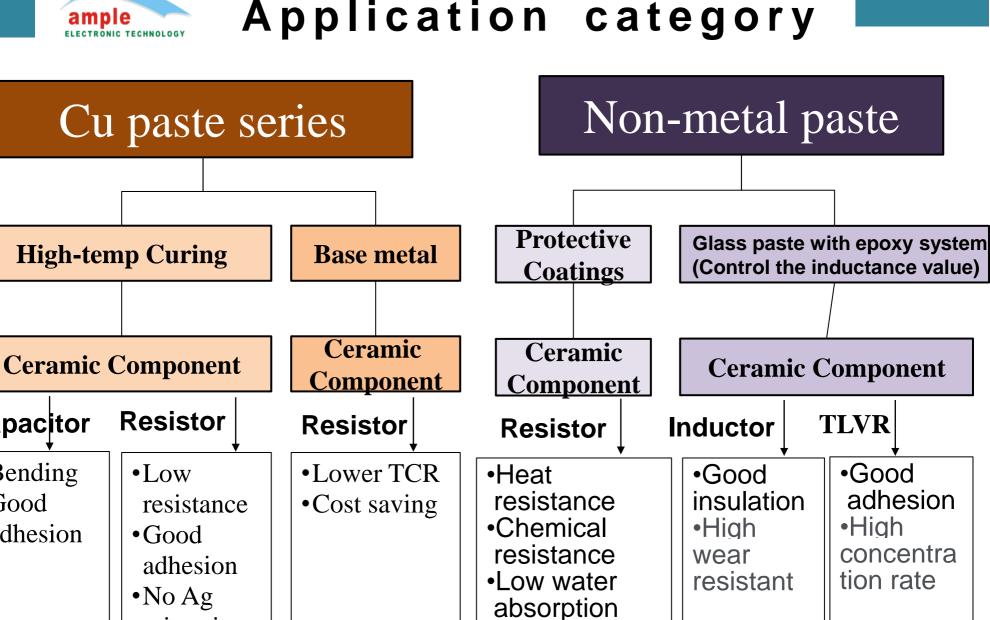
Capacitor

Bending

adhesion

migration

•Good



Anti-Sulfuration



### **Development Milestones**

2024

Ag paste

Ag paste

- 1.Passed IC product certification
- 2. Develop Japanese market
- 3. Photovoltaic production

4. Expand existing market share

Cu paste

1.Expand the Japanese and **Korean markets-Passive** Components

2.Expand MLCC market share

1.Officially entered the IC product market

2. Obtain Japanese market certification

Cu paste

- 1. Expand the Japanese and **Korean markets-Passive** Components
- 2.Expand MLCC market share

Alloy paste

1.Import into the AI market

2.Obtain certification for glass substrate transmission

2025~

Expand ESG certified products to promote the market to reduce carbon emission pollution and integrate with the world's zero pollution



#### Passive component industry output value



The output value of passive components has been experiencing negative growth for two consecutive years. Although demand for consumer electronics terminals is still weak this year, Al servers and other products have made up for the gap. The Ministry of Economic Affairs believes that growth is expected to turn positive this year.

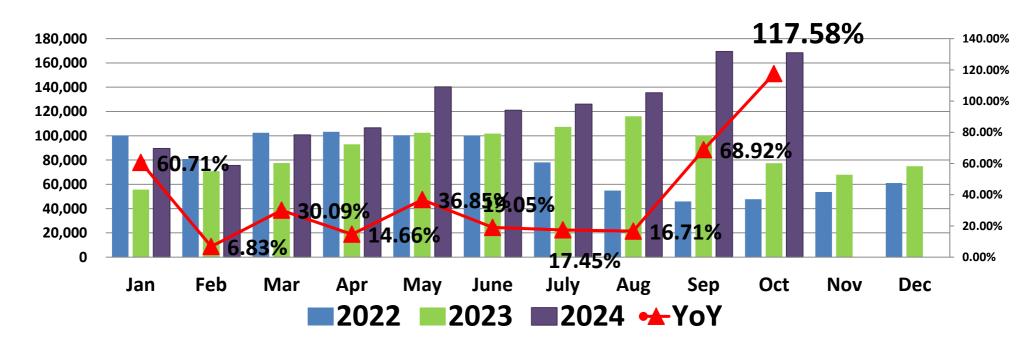
(Photo source/Ministry of Economic Affairs)



## **2024 Monthly Revenue**

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	0ct	Nov	Dec	Accumulated
2021	134, 517	140, 857	146, 066	154, 568	155, 720	162, 519	166, 611	165, 828	162, 539	131, 852	112, 998	101, 094	1, 735, 167
2022	100, 068	80, 781	102, 422	103, 193	100, 299	100, 052	78, 029	54, 894	45, 927	47, 703	53, 678	61, 045	928, 090
2023	55, 712	70, 767	77, 474	92, 910	102, 508	101, 741	107, 330	116, 087	100, 286	77, 414	67, 862	74, 912	1, 045, 002
2024	89, 533	75, 599	100, 786	106, 535	140, 287	121, 125	126, 057	135, 482	169, 400	168, 439			1, 233, 243
YoY	60.71%	6.83%	30.09%	14.66%	36.85%	19.05%	17.45%	16.71%	68.92%	117.58%			
MoM	19. 52%	-15. 56%	33. 32%	5. 70%	31. 68%	-13.66%	4.07%	7. 48%	25. 04%	-0.57%			

#### 2024 Monthly Revenue







## Metal material cost, gross margin



	Ag	Cu
	The pricing formula is negotiated when the customer imports and approves Selling price = (silver price * silver content) + processing fee	The Cu paste price is negotiated at the time of import approval, and the price is fixed, no linked to the copper price.
Materia I cost	When a customer places an order, AMPLE places an order simultaneously with the supplier. The increase or decrease in the silver price is absorbed by the customer and does not affect the profit per kilogram of silver paste.	Even if the price of copper currently rises to US\$10,000 per metric ton, it is equivalent to US\$10 per kilogram. However, the price of copper powder on the market is 60-80 US dollars per kilogram. Copper ingot account for a very low proportion of copper powder materials. Copper price fluctuations are still within an acceptable range. Suppliers will not reflect the increase in copper prices. Therefore, the purchase of copper powder is at a fixed price and is not affected by rising copper prices.
Gross margin	The gross profit margin will be affected by the price of silver. When the price of silver rises, the gross profit margin will decrease slightly, and vice versa.	Therefore, the gross profit margin of copper paste is not affected by the rise and fall of copper prices.



## Ag vs Cu Metal prices

Æ≥KITCO°		C 16				
Mon 11 Nov-2024	17:01	Au	to-update			
The Spot Market is	s Open (	Closes in 13 hrs. 0 mins				
Precious Metals -	■ USD ~	KILO	1			
Updated at	Bid	Ask	Change ✓			
17:01 <b>Gold</b>	85,810	85,842	-472.62			
17:00 Silver	1,006	1,009	+0.48			
17:01 Platinum	31,475	31,797	+353.66			
17:00 Palladium	31,314	32,600	0.00			
07:00 Rhodium	146,285	163,968	0.00			
KGX Did Platinum really go up 11.0 (1.14)?						
Base Metals —	■USD ~	KILO	-			
Updated at	Bid	Ask	Change ✓			
17:00 Copper	9.3007	9.3032	+0.043			
17:00 Nickel	15.8067	15.8217	-0.140			
08:59 Aluminum	3.4673	3.4713	+0.890			
17:00 <b>Zinc</b>	2.9948	2.9968	+0.021			



# **Statements of Comprehensive Income— Quarterly**

3Q2024

							•	
(Unit: NT Thousand )	2021	2022	2023	3Q2024	2Q2024	1Q2024	QoQ	YoY
Net revenue	1, 734, 567	928, 090	1, 045, 002	430, 938	367, 948	265, 918	17%	33%
Gross profit	351, 754	194, 267	224, 069	84, 727	89, 245	56, 885	-5%	32%
Gross margin(%)	20%	21%	21%	20%	24%	21%	-17%	0%
Operating expenses	(107, 357)	(89, 559)	(95, 247)	(25, 228)	(26, 273)	(24, 249)	-4%	7%
Operating expenses rate(%)	-6%	-9%	-9%	-6%	-7%	-9%	-14%	-14%
Operating income	244, 397	104, 708	128, 822	59, 499	62, 972	32, 636	-6%	46%
Operating margin(%)	14%	12%	12%	14%	17%	12%	-18%	0%
Net foreign exchange gain	7, 266	12, 872	4,808	(9,591)	5, 990	11, 119	-260%	-243%
Non-operating incomes and expenses	(3, 088)	(1, 163)	9, 537	(3, 275)	2, 127	2, 100	-254%	22%
Income before income tax	248, 575	116, 417	143, 167	46, 633	71, 089	45, 855	-34%	4%
Income tax expense	(47, 450)	(24,059)	(26, 443)	(9,535)	(15, 025)	(8,464)	-37%	9%
Net income	201, 125	92, 358	116, 724	37, 098	56, 064	37, 391	-34%	3%
Net margin(%)	12%	10%	11%	9%	15%	14%	-44%	-23%
EPS(NT\$)	6. 70	3.08	3.90	1. 23	1.86	1.24	-34%	3%
Depreciation	21,097	24, 873	23, 682	5, 825	5, 931	5, 963		
CAPEX	24, 937	12, 419	13, 020	1,960	2, 602	4, 395		



#### Statements of Comprehensive Income—

#### $\mathsf{YTD}$

Unit: NT Thousand )		$Q1 \sim Q3  2024$	Q1~Q3 2023	YoY
et revenue		1, 064, 804	824, 815	29%
ross profit		230, 857	176, 860	31%
	Gross margin(%)	22%	21%	5%
perating expenses		(75, 750)	(70, 313)	8%
Operating	expenses rate(%)	<b>-7%</b>	-8%	-13%
perating income		155, 107	106, 547	46%
0pe	rating margin(%)	15%	13%	15%
et foreign exchange gai	n	7, 518	14, 125	-47%
on-operating incomes an	d expenses	952	(1,058)	-190%
ncome before income tax		163, 577	119, 614	37%
ncome tax expense		(33,024)	(23, 285)	42%
et income		130, 553	96, 329	36%
	Net margin(%)	12%	12%	5%
PS(NT\$)		4. 34	3. 23	34%
epreciation		17, 719	17, 772	
APEX		8, 957	5, 994	
Operating perating income Ope et foreign exchange gai on-operating incomes an ncome before income tax ncome tax expense et income PS(NT\$) epreciation	expenses rate(%) rating margin(%) n d expenses	(75, 750) -7% 155, 107 15% 7, 518 952 163, 577 (33, 024) 130, 553 12% 4. 34	(70, 313) -8% 106, 547 13% 14, 125 (1, 058) 119, 614 (23, 285) 96, 329 12% 3, 23	-19 -19 -19



#### **Balance Sheets**

(Unit: NT Thousand )	2024/9/30	2023/12/31	2023/9/30
Cash and cash equivalents	98, 048	96, 295	92, 105
Accounts receivable, net	602, 283	407, 630	514, 151
Inventories	290, 953	261, 951	248, 002
Other current assets	71, 985	59, 590	26, 979
Total current assets	1, 063, 269	825, 466	881, 237
Property, plant and equipment	195, 873	197, 131	201, 114
Other non-current assets	164, 885	145, 880	120, 708
Total non-current assets	360, 758	343, 011	321, 822
Total assets	1, 424, 027	1, 168, 477	1, 203, 059
Current liabilities	547, 149	346, 843	405, 713
Non-Current liabilities	304	0	997
Total liabilities	547, 453	346, 843	406, 710
Common stocks	321, 127	321, 127	321, 127
Other equity interest	555, 447	500, 507	475, 222
Total equity	876, 574	821, 634	796, 349
Book value per share(NT\$)	27. 30	25. 59	24. 80
Key Indices			
Current ratio	194%	238%	217%
Debt ratio	38%	30%	34%



## Dividend Policy

Year	2019	2020	2021	2022	2023
EPS (NT\$)	1. 03	4. 74	6. 70	3. 08	3. 90
Dividends (NT\$)	1. 20	3. 20	4. 50	2. 20	2. 70
Dividend Payout Ratio(%)	116. 50%	67. 51%	67. 16%	71. 43%	69. 23%

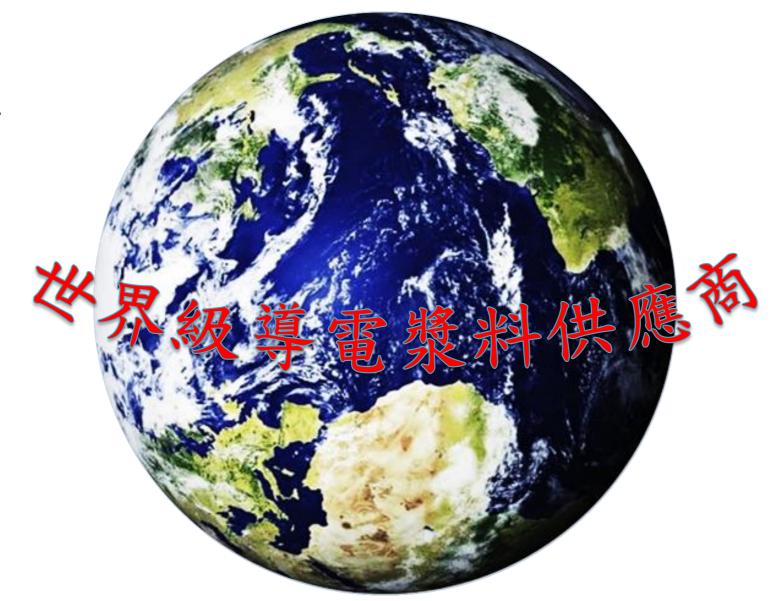
## Distributed dividends for 11 consecutive years!



#### Vision

凱歌長奏盛名

揚



勤奮

開拓質優

良