

May 21, 2026 03:05 PM GMT

AP Memory Technology Corp | Asia Pacific

Too early to be concerned about Si-Cap competition; OW

We think the market is overly concerned oabout competition in the early cycle. Our supply/demand model suggests ongoing supply shortage in the next three years. Time to accumulate more.

Our further thoughts on the Si-Cap competition (link): SEMCO (covered by Shawn Kim) was already a player in the Si-Cap market, but we believe its recently announced ~US\$1bn contract introduces competition to AP Memory's market share. We believe SEMCO's Si-Cap business uses a stacking technology as well and aims to address a similar application – i.e., EMIB; the advantage is the better foundry process from a potential Taiwanese partner, Winbond. That said, we think it will take time to acquire the equipment and go through qualification with substrate vendors, EMIB, and end customers.

Our supply/demand model suggests supply shortage in the next three years: For the non-TSM silicon capacitor market, we expect supply shortage of 57%for 2026, 16% for 2027, and 11% for 2028 (please refer to our supply/demand model: [Exhibit 1](#)). We see EMIB (TPU v10/v11 and potentially auto chips in the future), AI GPUs in China, and smartphone SoC as major market opportunities for silicon capacitors. Supply remains constrained with limited global capacity available.

Remain OW on AP Memory; VHM is the next driver: We maintain our earnings estimates and price target at NT\$1,555. In addition to Si-Cap, we think the market overlooks another big opportunity from VHM.

Remain OW on Powerchip: Powerchip is fully loaded with pricing up on all products (analog, logic, memory).

Remain EW on Winbond: We believe SEMCO will act as a fabless design company for its new contract, leveraging Winbond as its foundry partner. We view this as positive for Winbond, but we expect limited revenue contribution – only a low-single-digit pat of the revenue mix in 2027e. Our price target is unchanged.

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AP Memory Technology Corp (6531.TW, 6531 TT)

Greater China Technology Semiconductors | Taiwan

Stock Rating	Overweight
Industry View	Attractive
Price target	NT\$1,555.00
Up/downside to price target (%)	78
Shr price, close (May 21, 2026)	NT\$876.00
52-Week Range	NT\$1,150.00-255.00
Mkt cap, curr (mn)	NT\$141,758
Avg daily trading value (mn)	NT\$2,051

Fiscal Year Ending	12/25	12/26e	12/27e	12/28e
EPS (NT\$)**	7.74	17.65	34.34	60.74
Prior EPS (NT\$)**	-	-	-	-
EPS (NT\$)§	6.30	17.77	27.46	49.58
Revenue, net (NT\$ mn)	5,658	9,601	17,829	30,478
EBITDA (NT\$ mn)	1,474	3,037	6,491	11,733
ModelWare net inc (NT \$ mn)	1,258	2,874	5,591	9,888
P/E	57.9	49.6	25.5	14.4
ROE (%)	10.6	23.5	39.2	55.2
EV/EBITDA	41.3	42.4	19.5	10.5
Div yld (%)	1.2	1.4	0.0	0.0

Unless otherwise noted, all metrics are based on Morgan Stanley ModelWare framework

** = Based on consensus methodology

§ = Consensus data is provided by Refinitiv Estimates

e = Morgan Stanley Research estimates

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Silicon capacitor supply/demand model

Exhibit 1: Silicon capacitor supply/demand model

	2026	2027	2028	2029
Demand (non-TSM)				
EMIB - TPU v10 2nm Humufish shipment (k units)		1,000.0	2,500.0	1,000.0
Capacitor per chip assumption		150.0	150.0	150.0
Die per wafer		7,000.0	7,000.0	7,000.0
Wafers (k units)		21.4	53.6	21.4
EMIB - TPU v11 A16 Icefish shipment (k units)				500.0
Capacitor per chip assumption				200.0
Die per wafer				7,000.0
Wafers (k units)				14.3
China AI GPU				
Total China GPU shipment (k units)	1,972.0	3,420.0	4,696.0	5,927.0
Chips per CoWoS wafer assumption	20.0	20.0	20.0	20.0
CoWoS wafers (k units)	98.6	171.0	234.8	296.4
Market share (%)	10%	15%	20%	25%
Addressable CoWoS wafers (k units)	9.9	25.7	47.0	74.1
Smartphone SoC				
D9000 chips shipment (mn units)	39.5	40.5	46.0	48.3
LSC per dimensity chip	7.5	7.5	7.5	7.5
LSC (mn units)	296.3	303.8	345.0	362.3
LSC per wafer	20,000.0	20,000.0	20,000.0	20,000.0
Penetration assumption	10%	80%	100%	100%
Mediatek Wafers (k units)	1.5	12.2	17.3	18.1
Other high end chips shipment (mn units)	79.0	81.0	92.0	96.6
LSC per dimensity chip	7.5	7.5	7.5	7.5
LSC (mn units)	592.5	607.5	690.0	724.5
LSC per wafer	20,000.0	20,000.0	20,000.0	20,000.0
Penetration assumption	0%	10%	50%	80%
Non-Mediatek Wafers (k units)	-	3.0	17.3	29.0
AVGO Tomahawk (non-TSM)				
TH6 CoWoS booking (k units)	23.0	16.1	8.1	4.0
Total wafers demand (k units)				
	34.3	78.4	143.1	160.9
Total wafers sell-in demand (k units)				
	112.7	143.1	160.9	
Supply (non-TSM)				
PSMC / AP Memory				
3D stacking capacity (kwpm)	4.0	6.0	8.0	
3D stacking capacity (kwpy)	48.0	72.0	96.0	
Winbond / SEMCO				
3D stacking capacity (kwpm)		4.0	4.0	
3D stacking capacity (kwpy)		48.0	48.0	
Total wafers supply (k units)				
	48.0	120.0	144.0	
Supply shortage (%)	-57%	-16%	-11%	

Source: Morgan Stanley Research estimates

Valuation Methodology and Risks

Winbond Electronics Corp (2344.TW)

Base case, 2.7x 2026e P/B. This method is in line with the approach we adopt for Greater China memory IDM peers, in view of the industry's high volatility. We believe the stock merits a multiple beyond the high end of its historical band of 0.5-1.5x since 2017, as we are seeing DRAM pricing upside (even though pricing power could moderate into 2H26) and a sustainable NOR price hike.

Risks to Upside

- NOR Flash pricing increase, driven by stronger-than-expected demand
- Stronger-than-expected DRAM pricing given ongoing supply shortage
- Faster-than-expected SLC NAND development

Risks to Downside

- NOR Flash downcycle, driven by weaker demand
- Lower-than-expected DRAM pricing given ongoing oversupply
- Slower-than-expected SLC NAND development

AP Memory Technology Corp (6531.TW)

Base case, derived from a residual income model. Key RI model assumptions include 1) cost of equity constant at 9.2% (2.0% risk-free rate, 6% risk premium, 1.2 beta); 2) payout ratio of 67%; 3) terminal growth rate of 3.0%; and 4) medium-term growth rate of 16.0%.

Risks to Upside

- Stronger-than-expected consumer demand
- Faster-than-expected IPD ramp and WoW packaging development
- Milder competition from partners (foundry, memory house, GPU vendor) or other design houses

Risks to Downside

- Weaker-than-expected consumer demand
- Slower-than-expected IPD ramp and WoW packaging development
- Intensifying competition from partners (foundry, memory house, GPU vendor) or other design houses

Powerchip Semiconductor Manufacturing Co (6770.TW)

Base case, 2.1x 2026e P/B. This method is in line with our approach for Greater China memory IDM players, in view of the industry's high volatility. Our 2.1x target P/B is higher than the historical average of 1.5x since 2021, reflecting our optimistic view on improved pricing and utilization.

Risks to Upside

- Pricing power is sustained in 2026.
- Listing on main board attracts investment fund flows.

- Aluminum process enjoys higher margins.

Risks to Downside

- Competition from China intensifies.
- Price erosion is faster than expected.
- Demand from consumer electronics clients weakens further.
- Inventory in the supply chain takes longer to digest.

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(as of April 30, 2026)

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Equal-weight/Hold	1568	43%	358	39%	23%	715	44%
Not-Rated/Hold	4	0%	0	0%	0%	1	0%
Underweight/Sell	555	15%	84	9%	15%	202	12%
Total	3,673		909			1627	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

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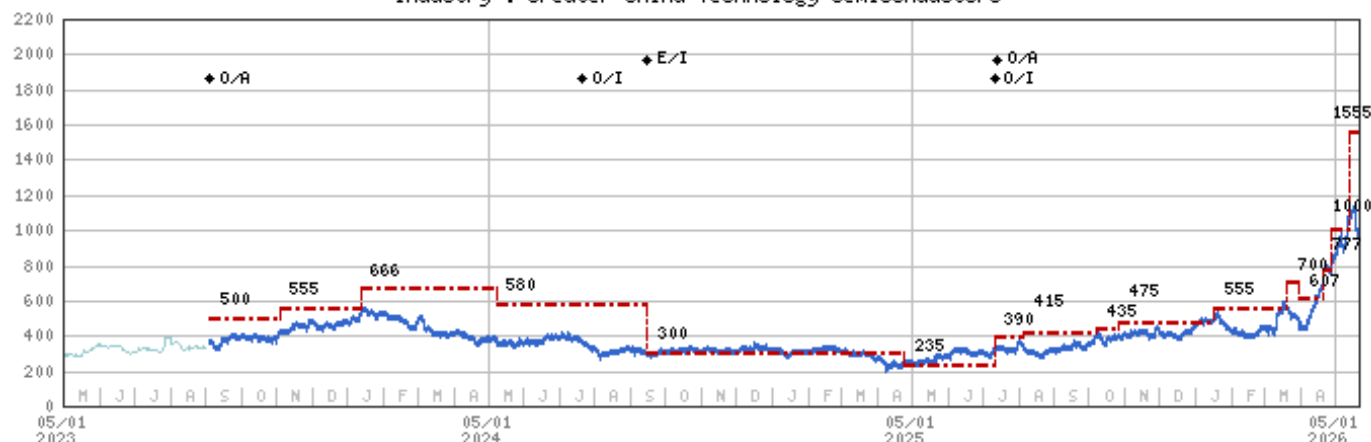
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Stock Price, Price Target and Rating History (See Rating Definitions)

AP Memory Technology Corp (6531.TW) - As of 05/21/26 GMT in TWD
Industry : Greater China Technology Semiconductors



Stock Rating History: 9/4/23 : O/A; 7/21/24 : O/I; 9/15/24 : E/I; 7/11/25 : O/I; 7/14/25 : O/A

Price Target History: 9/4/23 : 500; 11/3/23 : 555; 1/12/24 : 666; 5/8/24 : 580; 9/15/24 : 300; 4/25/25 : 235; 7/11/25 : 390;
8/6/25 : 415; 10/7/25 : 435; 10/27/25 : 475; 1/16/26 : 555; 3/20/26 : 700; 3/31/26 : 607; 4/20/26 : 777; 4/28/26 : 1000;
5/13/26 : 1555

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Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)
Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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Powerchip Semiconductor Manufacturing Co (6770.TW) - As of 05/21/26 GMT in TWD
Industry : Greater China Technology Semiconductors



Stock Rating History: 7/12/21 : U/I; 10/12/21 : U/C; 10/4/22 : U/A; 2/22/23 : U/I; 7/7/23 : U/A; 6/13/24 : E/A; 7/21/24 : E/I;
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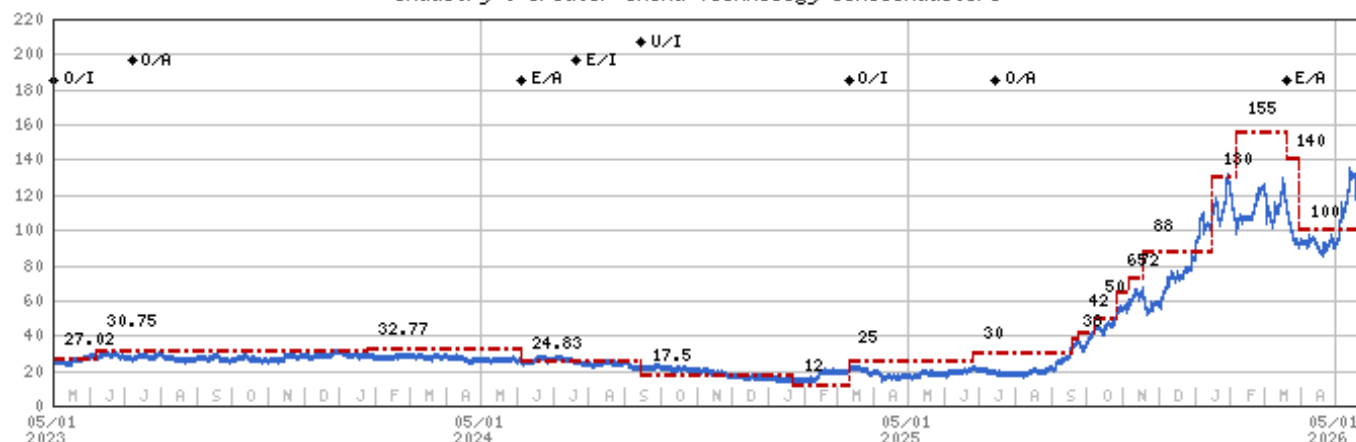
Price Target History: 7/12/21 : 58; 9/14/21 : 57; 3/28/22 : 53; 4/12/22 : 49; 6/21/22 : 40; 7/1/22 : 35; 7/15/22 : 33; 8/30/22 : 27;
10/13/22 : 23.5; 12/14/22 : 22.5; 10/27/23 : 21; 12/13/23 : 22; 6/13/24 : 25; 9/15/24 : 19; 1/20/25 : 16.5; 4/22/25 : 14.6;
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Winbond Electronics Corp (2344.TW) - As of 05/21/26 GMT in TWD Industry : Greater China Technology Semiconductors



Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target -- No Price Target Assigned (NA)
 Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) —
 Stock and Industry Ratings (abbreviations below) appear as ♦ Stock Rating/Industry View
 Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)
 Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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INDUSTRY COVERAGE: Greater China Technology Semiconductors

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/21/2026)
Charlie Chan		
ACM Research Inc (ACMR.O)	O (03/07/2023)	US\$71.60
Advanced Micro-Fabrication Equipment Inc (688012.SS)	O (11/06/2023)	Rmb475.80
Advanced Wireless Semiconductor Co (8086.TWO)	U (07/14/2025)	NT\$149.00
Alchip Technologies Ltd (3661.TW)	O (05/14/2021)	NT\$4,905.00
ASE Technology Holding Co. Ltd. (3711.TW)	O (09/15/2024)	NT\$510.00
Cambricon Technology Corporation (688256.SS)	O (04/27/2026)	Rmb1,290.90
Global Unichip Corp (3443.TW)	O (07/27/2024)	NT\$5,065.00
GlobalWafers Co Ltd (6488.TWO)	E (05/19/2026)	NT\$701.00
Gudeng Precision (3680.TWO)	O (11/25/2025)	NT\$544.00
Hua Hong Semiconductor Ltd (1347.HK)	E (03/12/2026)	HK\$128.00
Iluvatar CoreX Semiconductor Co., Ltd. (9903.HK)	O (04/27/2026)	HK\$444.20
King Yuan Electronics Co Ltd (2449.TW)	O (03/03/2023)	NT\$286.00
Maxscend Microelectronics Co Ltd (300782.SZ)	U (01/11/2021)	Rmb121.03
MediaTek (2454.TW)	O (11/28/2025)	NT\$3,550.00
MetaX Integrated Circuits (688802.SS)	E (04/27/2026)	Rmb723.60
Nanya Technology Corp. (2408.TW)	E (03/20/2026)	NT\$293.00
NAURA Technology Group Co Ltd (002371.SZ)	O (11/06/2023)	Rmb662.99
OmniVision Integrated Circuits Group Inc (603501.SS)	E (11/17/2025)	Rmb102.66
Phison Electronics Corp (8299.TWO)	E (02/25/2026)	NT\$2,335.00
SG Micro Corp. (300661.SZ)	E (11/03/2025)	Rmb109.62
Silergy Corp. (6415.TW)	U (05/19/2026)	NT\$557.00
SMIC (0981.HK)	O (10/21/2025)	HK\$74.20
TSMC (2330.TW)	O (02/07/2022)	NT\$2,230.00
UMC (2303.TW)	O (05/19/2026)	NT\$116.00
Vanguard International Semiconductor (5347.TWO)	E (01/14/2026)	NT\$163.50
WIN Semiconductors Corp (3105.TWO)	U (07/14/2025)	NT\$483.00

Daisy Dai, CFA

ASMP T Ltd (0522.HK)	O (07/24/2025)	HK\$174.90
China Resources Microelectronics Limited (688396.SS)	U (03/02/2026)	Rmb59.80
Elan Microelectronics Corp (2458.TW)	O (10/03/2025)	NT\$158.50
Empyrean Technology Co Ltd (301269.SZ)	E (01/17/2025)	Rmb97.22
Hangzhou Silan Microelectronics Co. Ltd. (600460.SS)	U (08/25/2025)	Rmb30.94
Innoscence (2577.HK)	E (10/13/2025)	HK\$65.25
JCET Group Co Ltd (600584.SS)	E (01/16/2026)	Rmb66.84
Shanghai Fudan Microelectronics (1385.HK)	O (03/07/2025)	HK\$36.32
SICC Co Ltd (688234.SS)	O (03/20/2026)	Rmb139.61
StarPower Semiconductor Ltd (603290.SS)	E (05/14/2026)	Rmb122.23
Unigroup Guoxin Microelectronics Co Ltd (002049.SZ)	U (01/10/2023)	Rmb77.89
Universal Scientific Ind. (Shanghai) (601231.SS)	O (11/05/2025)	Rmb37.29
Yangjie Technology (300373.SZ)	O (06/10/2022)	Rmb77.61

Daniel Yen, CFA

AP Memory Technology Corp (6531.TW)	O (07/11/2025)	NT\$876.00
ASMedia Technology Inc (5269.TW)	U (10/03/2025)	NT\$1,410.00
Aspeed Technology (5274.TWO)	O (06/09/2025)	NT\$16,440.00
Egis Technology Inc (6462.TWO)	E (01/28/2026)	NT\$140.50
Espressif Systems (688018.SS)	O (05/15/2023)	Rmb177.72
GigaDevice Semiconductor Beijing Inc (603986.SS)	O (05/15/2025)	Rmb431.90
Macronix International Co Ltd (2337.TW)	O (09/18/2025)	NT\$141.00
Montage Technology Co Ltd (6809.HK)	O (03/18/2026)	HK\$446.20
Montage Technology Co Ltd (688008.SS)	O (03/18/2026)	Rmb262.17
Novatek (3034.TW)	U (02/04/2026)	NT\$484.50
Nuvoton Technology Corporation (4919.TW)	U (11/10/2025)	NT\$181.50
Parade Technologies Ltd (4966.TWO)	E (01/30/2026)	NT\$789.00
Powerchip Semiconductor Manufacturing Co (6770.TW)	O (10/27/2025)	NT\$59.10
Realtek Semiconductor (2379.TW)	E (01/30/2026)	NT\$575.00
Shenzhen Goodix Technology Co Ltd (603160.SS)	U (07/14/2025)	Rmb63.46
Winbond Electronics Corp (2344.TW)	E (03/20/2026)	NT\$114.00
WPG Holdings (3702.TW)	O (03/16/2026)	NT\$123.50
WT Microelectronics Co. Ltd. (3036.TW)	O (01/27/2026)	NT\$291.50

Duan Liu

Dosilicon Co Ltd (688110.SS)	U (09/06/2024)	Rmb138.70
Shenzhen Longsys Electronics Co Ltd (301308.SZ)	E (02/25/2026)	Rmb539.00

Tiffany Yeh

AllRing Tech Co. (6187.TWO)	O (09/23/2025)	NT\$1,090.00
FOCI Fiber Optic Communications Inc (3363.TWO)	O (01/15/2025)	NT\$818.00
Himax Technologies Inc (HIMX.O)	E (02/04/2026)	US\$18.72
Hon Precision (7769.TW)	O (04/17/2026)	NT\$7,675.00
MPI Corporation (6223.TWO)	O (04/17/2026)	NT\$5,650.00
Silicon Motion (SIMO.O)	O (05/06/2024)	US\$258.02
WinWay Technology Co Ltd (6515.TW)	O (04/17/2026)	NT\$9,510.00

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* Historical prices are not split adjusted.