Morgan Stanley | RESEARCH

UPDATE

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Nuvoton Technology Corporation | Asia Pacific

Losses Widen; BMC Growth and Japan Restructuring Remain Key

AlphaSignals Earnings Reaction

Unchanged	**Modest shortfall**	**Modest revision lower**
Impact to our thesis	Financial results versus consensus	Direction of next 12-month consensus EPS

Source: Company data, Morgan Stanley Research

3Q losses widened Q/Q amid lower gross profit, increased opex and reduced non-operating income. Management sees scope for faster BMC growth in 2027, with execution and Japan restructuring critical to delivering earnings growth.

3Q losses widened: Revenue was NT$7.86bn, -1% Q/Q, +8% Y/Y, 3% above our estimate; gross profit was NT$2.9bn, -3% Q/Q, +13% Y/Y, 6% above our forecast; gross margin was 37.4%, -0.6ppt Q/Q, +1.7ppt Y/Y, 1.2ppt above our estimate. Loss per share was NT$1.24, wider Q/Q, Y/Y, and vs. our expectation. Management attributed gross margin weakness to product mix; back-end supply constraints and substantial AI-related R&D left operational progress around 1Q behind plan.

Demand remains mixed: Auto demand has stabilized after prior Y/Y declines, but management sees no clear rebound. PC demand was significantly weaker in 2H26 than in 1H26 with higher content per PC vs. 2025 helping cushion the impact of lower volumes. Memory cost increases have been passed through on memory-bundled MPUs, although some customers began pulling back in 4Q26. MCU repricing reflects foundry and OSAT costs. Most 2027 capacity has been secured but cost pass-through and supply availability do not establish margin expansion.

BMC and Japan remain the key milestones: Management sees scope for 2027 BMC Y/Y growth to exceed 2026's, with existing customers and multiple new customers, including a CSP, contributing. New customer revenue should initially be small with fuller contributions over one to two years. Current-gen products should dominate 2027 shipments; next-gen volumes may start modestly in 2H27. Japan remains the source of losses, making the Tower JV restructuring targeted by management for end-March 2027 central to recovery.

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Nuvoton Technology Corporation (4919.TW, 4919 TT)

Greater China Technology Semiconductors | Taiwan

Stock Rating	**Underweight**
Industry View	**Attractive**
Price target	NT$95.00
Up/downside to price target (%)	(24)
Shr price, close (Oct 30, 2026)	NT$124.50
52-Week Range	NT$230.00-49.80
Sh out, dil, curr (mn)	401
Mkt cap, curr (mn)	NT$49,904
EV, curr (mn)	NT$48,310
Avg daily trading value (mn)	NT$1,303

Fiscal Year Ending	12/25	12/26e	12/27e	12/28e
EPS (NT$)**	(3.96)	(2.35)	4.24	7.63
Prior EPS (NT$)**	-	(1.17)	4.15	7.64
EPS (NT$)§	(2.81)	(1.80)	2.02	7.64
Revenue, net (NT$ mn)	30,492	31,293	34,719	38,053
EBITDA (NT$ mn)	539	(177)	1,328	3,336
ModelWare net inc (NT$ mn)	(1,665)	(1,003)	1,822	3,280
P/E	NM	NM	29.4	16.3
ROE (%)	(10.6)	(7.6)	15.0	23.5
EV/EBITDA	36.8	NM	38.4	14.4
Div yld (%)	0.8	0.0	0.0	0.0
FCF yld ratio (%)**	(7.9)	(2.5)	(3.3)	5.0
Leverage (EOP) (%)	(12.2)	(1.6)	8.1	(10.9)

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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Earnings Estimate Revisions

We factor in the actual 3Q results: 3Q losses widened due to higher opex, lower non-operating income and tax expenses. Uncertainties remain around BMC and Japan, and demand remains mixed, so we do not yet revise our 2027-28 EPS estimates significantly.

Exhibit 1: Nuvoton: Estimate revisions

NT$ mn	New 2026E	Previous 2026E	Diff.	New 2027E	Previous 2027E	Diff.	New 2028E	Previous 2028E	Diff.
Net sales	31,293	31,059	1%	34,719	34,719	0%	38,053	38,053	0%
COGS	(19,461)	(19,402)		(21,394)	(21,394)		(22,466)	(22,466)	
Gross profit	11,832	11,657	1%	13,325	13,325	0%	15,586	15,586	0%
Operating expenses	(13,047)	(12,687)		(12,198)	(12,264)		(12,914)	(12,979)	
Operating profit	(1,215)	(1,030)	18%	1,127	1,061	6%	2,673	2,607	3%
Non-op. income (exp.)	589	832		791	683		780	600	
Pretax Income	(626)	(199)	215%	1,917	1,744	10%	3,453	3,207	8%
Taxes	(377)	(292)		(96)	0		(173)	0	
Net income	(1,003)	(491)	104%	1,822	1,744	4%	3,280	3,207	2%
Reported EPS (NT$)	(2.35)	(1.17)	**101%**	4.24	4.15	**2%**	7.63	7.64	**0%**
Margins									
Gross margin	37.8%	37.5%	0.3 ppt	38.4%	38.4%	0.0 ppt	41.0%	41.0%	0.0 ppt
Operating margin	-3.9%	-3.3%	-0.6 ppt	3.2%	3.1%	0.2 ppt	7.0%	6.9%	0.2 ppt
Pretax margin	-2.0%	-0.6%	-1.4 ppt	5.5%	5.0%	0.5 ppt	9.1%	8.4%	0.6 ppt
Net margin	-3.2%	-1.6%	-1.6 ppt	5.2%	5.0%	0.2 ppt	8.6%	8.4%	0.2 ppt

Source: Company data, Morgan Stanley Research estimates

Exhibit 2: Nuvoton: Quarterly Financials

(NT$ mn)	1Q25	2Q25	3Q25	4Q25	1Q26	2Q26	3Q26	4Q26e	2025	2026e	2027e	2028e
Total Revenues	**8,364**	**7,816**	**7,272**	**7,040**	**7,988**	**7,941**	**7,856**	**7,507**	**30,492**	**31,293**	**34,719**	**38,053**
Sequential Change	*15.1%*	*-6.6%*	*-7.0%*	*-3.2%*	*13.5%*	*-0.6%*	*-1.1%*	*-4.4%*				
Change vs Year Ago	*-1.2%*	*-5.0%*	*-8.6%*	*-3.2%*	*-4.5%*	*1.6%*	*8.0%*	*6.6%*	*-4.5%*	*2.6%*	*10.9%*	*9.6%*
Cost of Sales	**(4,914)**	**(5,088)**	**(4,675)**	**(4,627)**	**(4,846)**	**(4,922)**	**(4,915)**	**(4,778)**	**(19,304)**	**(19,461)**	**(21,394)**	**(22,466)**
Percent of Revenues	*58.7%*	*65.1%*	*64.3%*	*65.7%*	*60.7%*	*62.0%*	*62.6%*	*63.7%*	*63.3%*	*62.2%*	*61.6%*	*59.0%*
Gross Profit	**3,451**	**2,728**	**2,597**	**2,413**	**3,142**	**3,020**	**2,941**	**2,729**	**11,189**	**11,832**	**13,325**	**15,586**
Gross Margin	41.3%	34.9%	35.7%	34.3%	39.3%	38.0%	37.4%	36.3%	36.7%	37.8%	38.4%	41.0%
Total Opex	(3,177)	(3,030)	(3,113)	(3,097)	(3,254)	(3,353)	(3,448)	(2,992)	(12,417)	(13,047)	(12,198)	(12,914)
Q/Q	*6.3%*	*-4.7%*	*2.8%*	*-0.5%*	*5.1%*	*3.0%*	*2.8%*	*-13.2%*				
Y/Y	*3.2%*	*0.6%*	*3.6%*	*3.6%*	*2.4%*	*10.7%*	*10.8%*	*-3.4%*	*2.8%*	*5.1%*	*-6.5%*	*5.9%*
Percent of Revenues	*38.0%*	*38.8%*	*42.8%*	*44.0%*	*40.7%*	*42.2%*	*43.9%*	*39.9%*	*40.7%*	*41.7%*	*35.1%*	*33.9%*
R&D	(2,303)	(2,196)	(2,293)	(2,257)	(2,383)	(2,485)	(2,357)	(2,237)	(9,049)	(9,462)	(9,137)	(9,513)
Percent of Revenues	*27.5%*	*28.1%*	*31.5%*	*32.1%*	*29.8%*	*31.3%*	*30.0%*	*29.8%*	*29.7%*	*30.2%*	*26.3%*	*25.0%*
Sales and Marketing	(254)	(250)	(249)	(254)	(255)	(278)	(236)	(225)	(1,007)	(994)	(1,042)	(1,142)
Percent of Revenues	*3.0%*	*3.2%*	*3.4%*	*3.6%*	*3.2%*	*3.5%*	*3.0%*	*3.0%*	*3.3%*	*3.2%*	*3.0%*	*3.0%*
General and Admin	(620)	(584)	(571)	(586)	(616)	(590)	(540)	(530)	(2,361)	(2,275)	(2,019)	(2,259)
Percent of Revenues	*7.4%*	*7.5%*	*7.8%*	*8.3%*	*7.7%*	*7.4%*	*6.9%*	*7.1%*	*7.7%*	*7.3%*	*5.8%*	*5.9%*
Operating Income	**273**	**(302)**	**(516)**	**(684)**	**(112)**	**(333)**	**(507)**	**(263)**	**(1,228)**	**(1,215)**	**1,127**	**2,673**
Percent of Revenues	*3.3%*	*-3.9%*	*-7.1%*	*-9.7%*	*-1.4%*	*-4.2%*	*-6.5%*	*-3.5%*	*-4.0%*	*-3.9%*	*3.2%*	*7.0%*
% QoQ	*-224.2%*	*-210.4%*	*71.1%*	*32.4%*	*-83.6%*	*197.7%*	*52.2%*	*-48.1%*	**(1,228)**	**(1,215)**	**1,127**	**2,673**
Total Non-operating Income(Loss)	**59**	**(343)**	**45**	**22**	**283**	**212**	**10**	**83**	**(217)**	**589**	**791**	**780**
Forex gain (loss)	35	(588)	0	0	54	10	0	0	(553)	64	0	0
Interest expense	(40)	(52)	(50)	(41)	(39)	(38)	0	0	(182)	(78)	0	0
Interest income	72	60	43	37	35	40	0	38	212	113	161	240
Net Investment Income	(14)	155	0	0	(46)	(2)	0	0	141	(48)	450	360
Investment Disposal Gain (loss)	0	0	0	0	0	0	0	0	0	0	0	0
Other income (expense)	6	82	52	26	280	202	10	45	166	537	180	180
Profit Before Taxes	**333**	**(644)**	**(471)**	**(662)**	**172**	**(121)**	**(497)**	**(180)**	**(1,445)**	**(626)**	**1,917**	**3,453**
Percent of Revenues	*4.0%*	*-8.2%*	*-6.5%*	*-9.4%*	*2.1%*	*-1.5%*	*-6.3%*	*-2.4%*	*-4.7%*	*-2.0%*	*5.5%*	*9.1%*
Change vs Year Ago	*-17.9%*	*-1410.6%*	*1227.5%*	*3329.9%*	*-48.4%*	*-81.2%*	*5.5%*	*-72.8%*				
Taxes	(115)	(30)	(43)	(32)	(164)	(128)	(62)	(22)	(220)	(377)	(96)	(173)
Tax Rate	*34.6%*	*-4.7%*	*-9.0%*	*-4.8%*	*95.8%*	*-105.8%*	*-12.5%*	*-12.5%*	*-15.2%*	*-60.2%*	*5.0%*	*5.0%*
Reported Income (TW GAAP)	**217**	**(675)**	**(513)**	**(694)**	**7**	**(249)**	**(559)**	**(202)**	**(1,665)**	**(1,003)**	**1,822**	**3,280**
Percent of Revenues	*2.6%*	*-8.6%*	*-7.1%*	*-9.9%*	*0.1%*	*-3.1%*	*-7.1%*	*-2.7%*	*-5.5%*	*-3.2%*	*5.2%*	*8.6%*
Change vs Year Ago	*-46.8%*	*3061.4%*	*386.9%*	*1011.9%*	*-96.7%*	*-63.1%*	*8.9%*	*-70.8%*	*-857.2%*	*-39.7%*	*-281.6%*	*80.1%*
MW Diluted EPS (NT$, TW GAAP)	**0.52**	**(1.61)**	**(1.22)**	**(1.65)**	**0.02**	**(0.58)**	**(1.30)**	**(0.47)**	**(3.96)**	**(2.35)**	**4.24**	**7.63**
EBS Dilution (%)	*11.9%*	*0.0%*	*0.0%*	*0.0%*	*11.9%*	*0.0%*	*0.0%*	*0.0%*	*11.9%*	*-0.1%*	*11.9%*	*11.9%*
Reported Basic EPS (NT$, GAAP)	**0.52**	**(1.61)**	**(1.22)**	**(1.65)**	**0.02**	**(0.58)**	**(1.24)**	**(0.47)**	**(3.96)**	**(2.35)**	**4.24**	**7.63**
Sequential Change	*-448.4%*	*-410.3%*	*-24.1%*	*35.5%*	*-101.0%*	*-3509.8%*	*124.5%*	*-63.8%*	*-856.7%*	*-40.7%*	*-280.5%*	*80.1%*

Source: Company data, Morgan Stanley Research

Nuvoton: Valuation Methodology

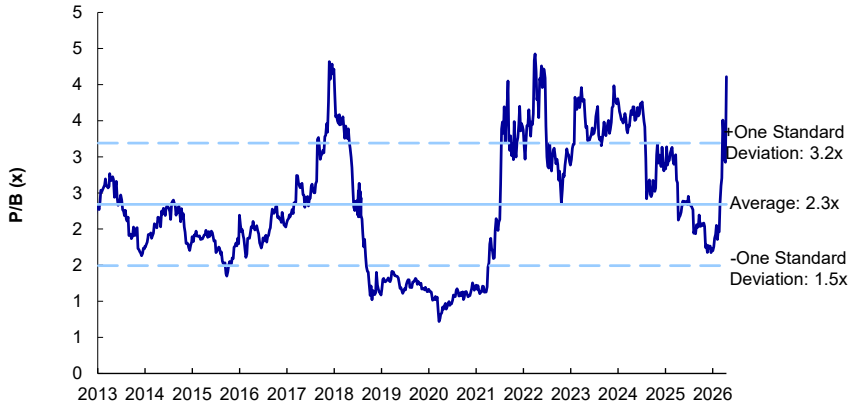
PT is unchanged at NT$95.00: We factor in our earnings estimate changes. We maintain the other assumptions in our RI model, including a 9.2% cost of equity (beta of 1.2, risk-free rate of 2.0% and risk premium of 6.0%), payout ratio of 55%, a medium-term growth rate of 7.0% and a terminal growth rate of 3.5%. Our bull- and bear-case scenario values also are unchanged at NT$143.00 and NT$48.00, respectively.

Exhibit 3: RI model

(NT$ mn)	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	2035e	2036e	2037e
Total Equity	12,115	13,936	17,216	18,989	20,885	22,915	25,086	27,409	29,895	32,555	35,401	38,447
Net Profit	(1,003)	1,822	3,280	3,510	3,755	4,018	4,300	4,601	4,923	5,267	5,636	6,030
ROAE	NM	14.0%	21.1%	19.4%	18.8%	18.3%	17.9%	17.5%	17.2%	16.9%	16.6%	16.3%
Residual Income	NA	580	1,653	1,754	1,830	1,911	1,997	2,089	2,187	2,293	2,405	2,525
Spread	NA	4.8%	11.9%	10.2%	9.6%	9.1%	8.7%	8.3%	8.0%	7.7%	7.4%	7.1%
2026	1.00	0.92	0.84	0.77	0.70	0.64	0.59	0.54	0.49	0.45	0.41	0.38
Ending Equity Capital	12,115											
PV of Forecast Period	11,205											
PV of Continuing Value	17,412											
Equity Value	40,731											
No. of Shares	427											
Projected Price (NT$)	95											

Source: Company data, Morgan Stanley Research estimates

Exhibit 4: P/B



Source: Company data, Morgan Stanley Research estimates

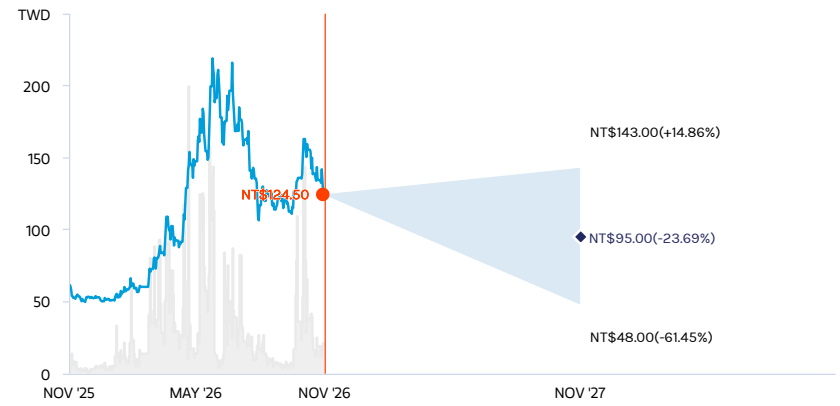
Risk Reward – Nuvoton Technology Corporation (4919.TW)

Awaiting gross margin recovery to turn positive

PRICE TARGET NT$95.00

Base case, residual income model. We assume a 9.2% cost of equity (beta 1.2, risk-free rate 2.0% and risk premium 6.0%), a payout ratio of 55%, a medium-term growth rate of 7.0%, and a terminal growth rate of 3.5%.

RISK REWARD CHART



Key: Historical Stock Performance ● Current Stock Price ◆ Price Target

Source: Refinitiv, Morgan Stanley Research

UNDERWEIGHT THESIS

- Demand in the auto and industrial segments is recovering, but at a mild pace.
- Nuvoton is well positioned to expand MPU share through bundled sales with Winbond's DDR4.
- We also see business opportunities in BMC/BMIC for AI servers.
- We expect the company to remain loss-making in 4Q26 and are awaiting GM recovery before turning more positive on the stock, which we view as overvalued.

Risk Reward Themes

Contrarian:	*Negative*
Electric Vehicles:	*Positive*
Self-help:	*Positive*

View descriptions of Risk Rewards Themes here

BULL CASE NT$143.00

34x 2027e EPS

NTCJ enjoys a 15%+ revenue CAGR over 2025-28. Operating margin improves to 10%, on average, in 2026-28.

BASE CASE NT$95.00

24x 2027e EPS

NTCJ enjoys a 5% revenue CAGR over 2025-28. Operating margin fluctuates during 2025-28 between -4% and +7%, mainly reflecting R&D investment and pricing pressure on gross margin.

BEAR CASE NT$48.00

11x 2027e EPS

NTCJ has no revenue growth in 2025-28. Operating margin ~0% in 2026-28.

Risk Reward – Nuvoton Technology Corporation (4919.TW)

KEY EARNINGS INPUTS

Drivers	Dec 2025	Dec 2026e	Dec 2027e	Dec 2028e
Gross margin (%)	37	38	38	41
MCU ASP growth (%)	(5)	(1)	(5)	(6)
Operating margin (%)	(5)	(3)	5	9

INVESTMENT DRIVERS

- MCU unit shipments
- MCU pricing trend
- Operating expenses
- Automotive demand

GLOBAL REVENUE EXPOSURE



- 0-10% Europe ex UK
- 0-10% Japan
- 0-10% North America
- 20-30% APAC, ex Japan, Mainland China and India
- 50-60% Mainland China

Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies here

RISKS TO PT/RATING

RISKS TO UPSIDE

- MCU up-cycle is more sustained than expected.
- China's MCU localization is faster than expected.
- Traction from auto and BMC business is greater.
- Margin improvement is more significant.

RISKS TO DOWNSIDE

- MCU up-cycle ends earlier with severe pricing erosion.
- China's MCU localization is slower than expected.
- Traction from auto and BMC business is less.
- Margins contract amid more intensified competition.

OWNERSHIP POSITIONING

Inst. Owners, % Active 31.8%

Source: Refinitiv, Morgan Stanley Research

MS ESTIMATES VS. CONSENSUS

FY Dec 2026e

Sales / Revenue (NT$, mn)
◆ 31,293
Note: There are not sufficient brokers supplying consensus data for this metric

EBIT (NT$, mn)
◆ (1,215)
Note: There are not sufficient brokers supplying consensus data for this metric

EPS (NT$)
◆ (2.35)
Note: There are not sufficient brokers supplying consensus data for this metric

ROE (%)
◆ (7.6)
Note: There are not sufficient brokers supplying consensus data for this metric

◆ Mean ◆ Morgan Stanley Estimates

Source: Refinitiv, Morgan Stanley Research

Financial Summary

Exhibit 5: Nuvoton: Financial Summary

Income Statement, 2025-2028e, Year End Dec

(NT$ mn)	2025	2026e	2027e	2028e
Turnover	**30,492**	**31,293**	**34,719**	**38,053**
YoY Growth	*-4.5%*	*2.6%*	*10.9%*	*9.6%*
Less: COGS	**(19,304)**	**(19,461)**	**(21,394)**	**(22,466)**
Variable costs	-	-	-	-
Depreciation & amort	-	-	-	-
Gross profit	**11,189**	**11,832**	**13,325**	**15,586**
YoY Growth	*-7.5%*	*5.7%*	*12.6%*	*17.0%*
% margin	*36.7%*	*37.8%*	*38.4%*	*41.0%*
Operating Expenses:	**(12,417)**	**(13,047)**	**(12,198)**	**(12,914)**
R&D	(9,049)	(9,462)	(9,137)	(9,513)
Sales and Marketing	(1,007)	(994)	(1,042)	(1,142)
General and Admin	(2,361)	(2,275)	(2,019)	(2,259)
Operating Profit	**(1,228)**	**(1,215)**	**1,127**	**2,673**
YoY Growth	*-9669.4%*	*-1.0%*	*-192.7%*	*137.2%*
% margin	*-4.0%*	*-3.9%*	*3.2%*	*7.0%*
Total Non-op	**(217)**	**589**	**791**	**780**
Pretax Profit	(1,445)	(626)	1,917	3,453
YoY Growth	*-461.5%*	*-56.6%*	*-406.1%*	*80.1%*
% margin	*-4.7%*	*-2.0%*	*5.5%*	*9.1%*
Tax	(220)	(377)	(96)	(173)
Net Income bf. Emp. Bonus	(1,889)	(1,002)	2,068	3,723
Employee bonus expense	225	(1)	(246)	(443)
Reported Net Income	(1,665)	(1,003)	1,822	3,280
Reported EPS (NT$)	**(3.96)**	**(2.35)**	**4.24**	**7.63**
ModelWare EPS (NT$)	**(3.96)**	**(2.35)**	**4.24**	**7.63**

Key Ratios

	2025	2026e	2027e	2028e
Return (%)				
ROAA	*(5.2%)*	*(3.1%)*	*5.4%*	*9.1%*
ROAE	*(11.6%)*	*(7.1%)*	*12.6%*	*21.1%*
OP. ATO	*164.6%*	*164.8%*	*150.3%*	*157.1%*
Gearing (x)				
Net Debt/ Equity	(0.2x)	(0.1x)	0.1x	(0.1x)
Current Ratio	2.1x	2.0x	2.2x	2.7x
Quick Ratio	1.3x	1.1x	1.2x	1.7x
Operating Cycle				
AR/NR Turnover (days)	54	55	53	52
Inventory Turnover (days)	132	130	123	124
AP Turnover (days)	46	46	43	44
Cash Conversion (days)	139	140	132	133

Balance sheet

(NT$ mn)	2025	2026e	2027e	2028e
Assets				
Cash & Equivalents	7,203	5,850	6,078	10,730
Marketable Security	1	1	1	1
A/R & N/R	3,964	4,227	5,489	5,487
Inventories	6,217	6,420	7,942	7,587
Other Current Asset	917	917	917	917
Total current assets	**18,301**	**17,414**	**20,427**	**24,721**
LT Investment	863	815	1,265	1,625
Total Fixed Assets	5,836	5,833	6,726	7,227
Total Other Assets	4,992	4,992	4,992	4,992
Total Assets	**29,991**	**29,054**	**33,409**	**38,565**
A/P & N/P	2,187	2,252	2,786	2,661
Accrued Expenses	13	13	13	13
Other Payable	3,430	3,430	3,430	3,430
Total Current Liab.	**8,842**	**8,908**	**9,442**	**9,317**
L-T Liabilities	4,865	4,865	6,865	8,865
Total Other L-T Liab	3,166	3,166	3,166	3,166
Total Liabilities	**16,874**	**16,939**	**19,473**	**21,348**
Common Stock	4,198	4,198	4,198	4,198
Preferred Stock				
Capital Reserve	7,100	7,100	7,100	7,100
Retained earnings	1,820	817	2,639	5,919
Treasury Stock	0	0	0	0
Total Equity	**13,118**	**12,115**	**13,936**	**17,216**
Total Liab. & Equity				

Cash Flow Statement

(NT$ mn)	2025	2026e	2027e	2028e
Net Income	(1,665)	(1,003)	1,822	3,280
Depreciation	1,767	1,039	201	664
Net Investment Losses (Gains)	(0)	0	0	0
Others	(392)	(353)	(2,700)	(127)
Cash Flow-Operating	**(290)**	**(318)**	**(677)**	**3,816**
(Purchase) of FA	(986)	(1,035)	(1,094)	(1,165)
Sale of Fix Asset	3	0	0	0
(Purchase)L-T Inv.	0	0	0	0
Sale of L-T Inv.	0	0	0	0
Sale(Pur.)S-T Inv.	54	0	0	0
Cash Flow-Investing	**(1,211)**	**(1,035)**	**(1,094)**	**(1,165)**
Inc(Dec)-S-T Debt	(857)	0	2,000	2,000
Dividend Paid	(168)	0	0	0
Dir.&Emp.Bonus	0	0	0	0
Proceed from New Issue	0	0	0	0
Dec/Inc-TreasureSt	0	0	0	0
Others	4,348	0	0	0
Cash Flow-Financing	**3,323**	**0**	**2,000**	**2,000**
Change in Cash	**1,499**	**(1,353)**	**229**	**4,652**
Net cash/(debt), b/f	5,704	7,203	5,850	6,078
Net cash/(debt), c/f	**7,203**	**5,850**	**6,078**	**10,730**

Source: Company data, Morgan Stanley Research estimates

Risk Reward Reference links

1. View explanation of Options Probabilities methodology - Options_Probabilities_Exhibit_Link.pdf

2. View descriptions of Risk Rewards Themes - RR_Themes_Exhibit_Link.pdf

3. View explanation of regional hierarchies - GEG_Exhibit_Link.pdf

4. View explanation of Theme/Exposure methodology - ESG_Sustainable_Solutions_External_Link.pdf

5. View explanation of HERS methodology - ESG_HERS_External_Link.pdf

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Not-Rated/Hold	2	0%	1	0%	50%	1	0%
Underweight/Sell	570	15%	92	10%	16%	218	13%
Total	3,684		946			1681	

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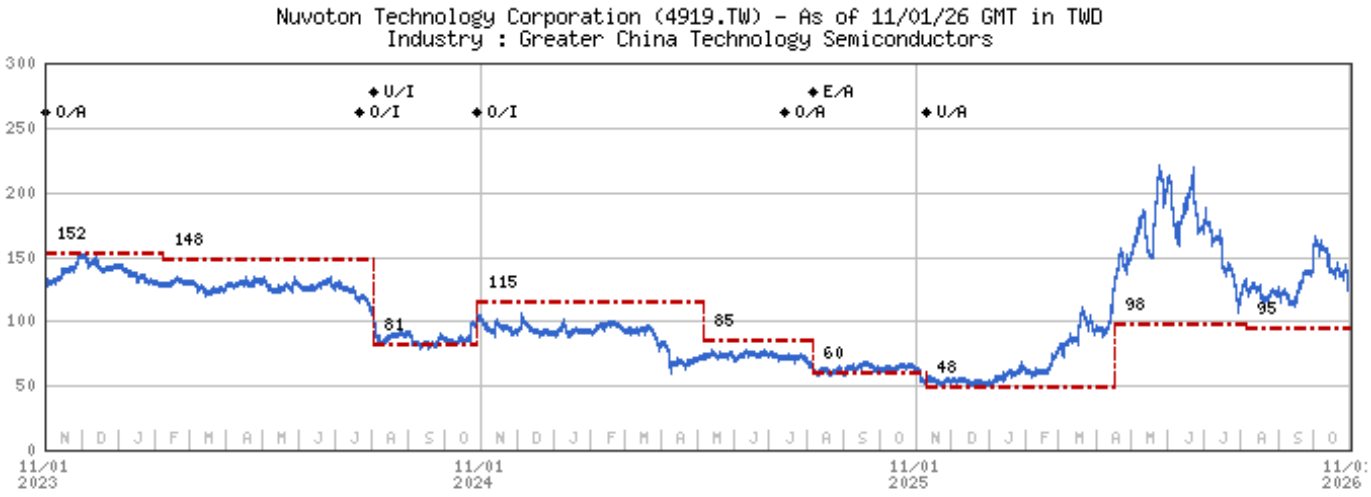
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Price Target History: 8/5/21 : 200; 1/17/22 : 212; 5/6/22 : 242; 7/12/22 : 168; 5/15/23 : 143; 8/14/23 : 152; 2/7/24 : 148; 8/2/24 : 81; 10/29/24 : 115; 5/7/25 : 85; 8/6/25 : 60; 11/10/25 : 48; 4/17/26 : 98; 8/5/26 : 95

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target No Price Target Assigned (NA)
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INDUSTRY COVERAGE: Greater China Technology Semiconductors

COMPANY (TICKER)	RATING (AS OF)	PRICE* (10/30/2026)
Charlie Chan		
Advanced Wireless Semiconductor Co (8086.TWO)	U (07/14/2025)	NT$114.00
Alchip Technologies Ltd (3661.TW)	O (05/14/2021)	NT$3,425.00
ASE Technology Holding Co. Ltd. (3711.TW)	O (09/15/2024)	NT$668.00
Cambricon Technology Corporation (688256.SS)	O (04/27/2026)	Rmb880.00
CXMT Corp (688825.SS)	O (08/26/2026)	Rmb41.80
Global Unichip Corp (3443.TW)	O (06/24/2026)	NT$7,635.00
GlobalWafers Co Ltd (6488.TWO)	E (05/19/2026)	NT$756.00
Gudeng Precision (3680.TWO)	O (11/25/2025)	NT$492.50
Hua Hong Semiconductor Ltd (1347.HK)	E (03/12/2026)	HK$60.70
Iluvatar CoreX Semiconductor Co., Ltd. (9903.HK)	O (04/27/2026)	HK$61.50
MediaTek (2454.TW)	O (11/28/2025)	NT$3,915.00
MetaX Integrated Circuits (688802.SS)	E (04/27/2026)	Rmb450.00
Nanya Technology Corp. (2408.TW)	O (05/28/2026)	NT$454.50
Phison Electronics Corp (8299.TWO)	E (02/25/2026)	NT$1,930.00
SG Micro Corp. (300661.SZ)	E (11/03/2025)	Rmb81.43
Silergy Corp. (6415.TW)	U (05/19/2026)	NT$502.00
SMIC (0981.HK)	O (10/21/2025)	HK$42.98
TSMC (2330.TW)	O (02/07/2022)	NT$2,370.00
UMC (2303.TW)	O (05/19/2026)	NT$111.50
Vanguard International Semiconductor (5347.TWO)	U (10/30/2026)	NT$144.00
WIN Semiconductors Corp (3105.TWO)	O (10/29/2026)	NT$578.00
Daisy Dai, CFA		
ASMPT Ltd (0522.HK)	O (07/24/2025)	HK$105.00
China Resources Microelectronics Limited (688396.SS)	U (03/02/2026)	Rmb45.12

Empyrean Technology Co Ltd (301269.SZ)	E (01/17/2025)	Rmb86.17
Hangzhou Silan Microelectronics Co. Ltd. (600460.SS)	U (08/25/2025)	Rmb22.88
Hygon Information Technology Co., Ltd. (688041.SS)	O (07/03/2026)	Rmb170.20
Innoscience (2577.HK)	E (10/13/2025)	HK$27.40
JCET Group Co Ltd (600584.SS)	O (09/16/2026)	Rmb49.00
Shanghai Fudan Microelectronics (1385.HK)	O (03/07/2025)	HK$21.62
SICC Co Ltd (688234.SS)	O (03/20/2026)	Rmb70.42
SJ Semiconductor Corp (688820.SS)	E (09/16/2026)	Rmb74.40
StarPower Semiconductor Ltd (603290.SS)	U (10/31/2026)	Rmb65.05
Unigroup Guoxin Microelectronics Co Ltd (002049.SZ)	U (01/10/2023)	Rmb47.39
Universal Scientific Ind. (Shanghai) (601231.SS)	O (11/05/2025)	Rmb17.84
Yangjie Technology (300373.SZ)	O (06/10/2022)	Rmb70.41
Daniel Yen, CFA		
AP Memory Technology Corp (6531.TW)	O (07/11/2025)	NT$776.00
ASMedia Technology Inc (5269.TW)	U (10/03/2025)	NT$1,465.00
Aspeed Technology (5274.TWO)	O (06/09/2025)	NT$15,970.00
Egis Technology Inc (6462.TWO)	E (01/28/2026)	NT$95.70
Elan Microelectronics Corp (2458.TW)	O (10/03/2025)	NT$125.00
eMemory Technology Inc (3529.TWO)	O (08/18/2026)	NT$2,490.00
Espressif Systems (688018.SS)	O (05/15/2023)	Rmb131.60
GigaDevice Semiconductor Beijing Inc (603986.SS)	O (05/15/2025)	Rmb257.80
Himax Technologies Inc (HIMX.O)	E (02/04/2026)	US$10.87
Macronix International Co Ltd (2337.TW)	O (09/18/2025)	NT$95.40
Montage Technology Co Ltd (6809.HK)	O (03/18/2026)	HK$207.60
Montage Technology Co Ltd (688008.SS)	O (03/18/2026)	Rmb158.30
Novatek (3034.TW)	U (02/04/2026)	NT$575.00
Nuvoton Technology Corporation (4919.TW)	U (11/10/2025)	NT$124.50
Parade Technologies Ltd (4966.TWO)	U (10/29/2026)	NT$469.50
Powerchip Semiconductor Manufacturing Co (6770.TW)	O (10/27/2025)	NT$66.60
Realtek Semiconductor (2379.TW)	E (01/30/2026)	NT$803.00
Shenzhen Goodix Technology Co Ltd (603160.SS)	U (07/14/2025)	Rmb56.73
Silicon Motion (SIMO.O)	O (05/06/2024)	US$208.65
Winbond Electronics Corp (2344.TW)	O (05/28/2026)	NT$164.50
WPG Holdings (3702.TW)	O (03/16/2026)	NT$108.50
WT Microelectronics Co. Ltd. (3036.TW)	O (01/27/2026)	NT$207.00
Henry Zhao		
ACM Research Inc (ACMR.O)	O (03/07/2023)	US$45.47
Advanced Micro-Fabrication Equipment Inc (688012.SS)	O (11/06/2023)	Rmb213.69
Maxscend Microelectronics Co Ltd (300782.SZ)	U (01/11/2021)	Rmb50.10
NAURA Technology Group Co Ltd (002371.SZ)	O (11/06/2023)	Rmb478.74
OmniVision Integrated Circuits Group Inc (603501.SS)	E (10/29/2026)	Rmb82.45
Lucas Wang		
AllRing Tech Co. (6187.TWO)	O (09/23/2025)	NT$1,190.00
FOCI Fiber Optic Communications Inc (3363.TWO)	E (10/09/2026)	NT$474.50
Hon Precision (7769.TW)	O (04/17/2026)	NT$4,950.00
King Yuan Electronics Co Ltd (2449.TW)	O (03/03/2023)	NT$253.50
MPI Corporation (6223.TWO)	O (04/17/2026)	NT$4,610.00

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* Historical prices are not split adjusted.

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