

ASE Holdings (3711 ㄒㄣ)

Likely An Aggressive Capacity Expansion in 2027

Maintained Buy
Target price NT\$ 506

CoWoS-like capacity up by >150% YoY in 2027E: According to CNYES news report on April 10, ASE's COO indicated that 2026 will be a busy year for six new factories globally and expects room for upward revision from current plan of \$7bn capex in 2026, driven by AI demand. Together with our supply chain research, we now expect its CoWoS-like (FOCoS, FOCoS-B) capacity to be increased to 15KPM/45KPM/55KPM by end of 2026/2027/2028, or annual capacity of 136k/360k/567k implying +165%/+58% YoY in 2027/2028.

LEAP business to grow by >60% YoY in 2027E: On Feb 5, mgmt. raised its 2026 revenue guidance for LEAP business to \$3.2bn, a doubling of the \$1.6bn from 2025. We now estimate LEAP revenue to be \$3.4bn/\$5.5bn in 2026E/2027E, or 21%/27% of ATM revenue, driven by foundry partner's oS and CP outsourcing amid the increasing complexity of AI chip design, followed by the acceleration of CPU's migration to 2.5D packaging in 2H26. That said, Full Process appears to be the emerging driver fueled by: 1) AMD's Venice CPU, for which we estimate the capacity consumption to be ~170k, or ~4.3m units, in 2027 supported by robust server demand and AMD's enhanced position in agentic AI; 2) Nvidia's Vera CPU; 3) AWS Trainium. Overall, we expect CPU to be the key driver in 2027, and the next to watch will be Marvell (MRVL Hold)'s progress in Trainium 4, as we believe Marvell has edge in NPO solutions, and Marvell's AWS project usually at ASE. Structurally, we expect TSMC to focus on GPU/ASIC due to capacity tightness; hence, ASE will benefit. For industry design trends, we don't expect CoPoS to be adopted before 2028 but expect the adoption to emerge for CoWoP (Rubin Ultra's MCM) and 3DIC in 2028.

Raise TP to NT\$506: ASE is expected to hold earnings call on April 29, and we expect it to provide inline print and guidance, while the focus of the call will be on its CAPEX, LEAP business and the pricing outlook of its traditional business. From the broad semi cycle, we expect the OSAT upcycle to persist, driven by leading-edge, traditional demand recovery, price hikes etc., leading to sustained UTR and margins. Furthermore, we continue to expect upside for its LEAP business, with Full Process emerging as a key driver for 2027 and onward. By factoring in higher 2.5D capacity and LEAP business, we revise our EPS estimates by +3%/+5% in 2026E/2027E and lift our TP from NT\$420 to NT\$506, based on 25x 2027E P/E.

Risks: 1) AI slowdown; 2) consumer demand; 3) peer competition; 4) capacity delay.

Profit forecast

	2024	2025	2026E	2027E	2028E
Revenue (m)	595,410	645,388	760,967	891,308	987,674
Revenue YoY (%)	2.3	8.4	17.9	17.1	10.8
Net profit (m)	32,482	40,658	65,577	88,374	106,771
Net profit YoY (%)	2.4	25.2	61.3	34.8	20.8
EPS (NT\$)	7.4	9.4	15.0	20.2	24.5
P/E	58.9	46.3	28.9	21.4	17.7
ROE (%)	9.4	10.9	15.9	19.3	20.9

Source: Company data, GF Securities (Hong Kong) Brokerage.

Please be sure to read the disclosures at the end of this report carefully.

Jeff Pu, CFA

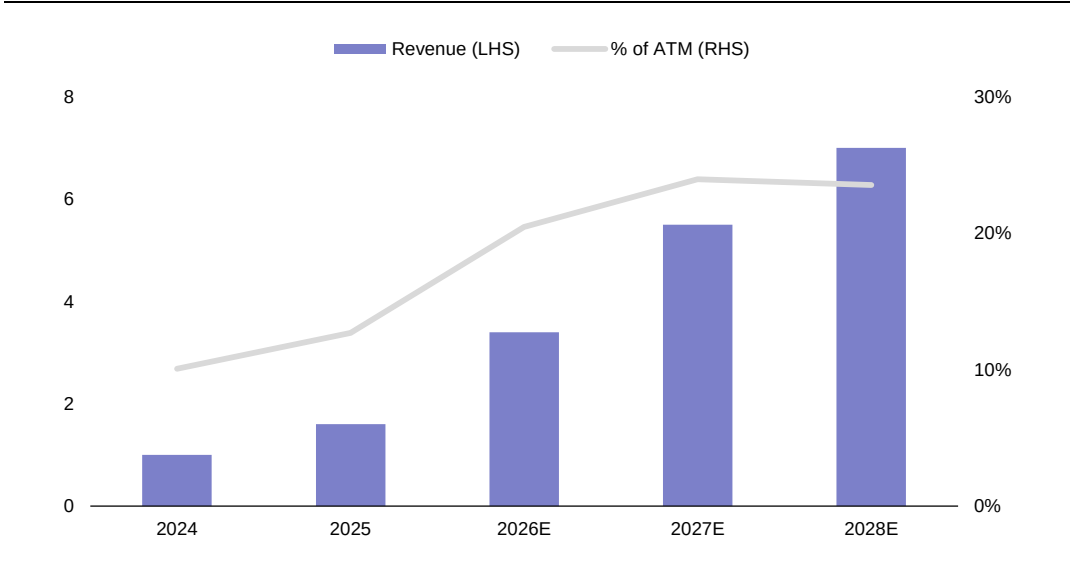
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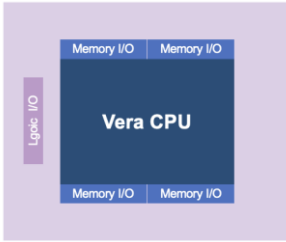
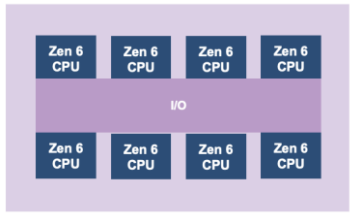
Earnings Forecast

Figure 1: ASE's LEAP revenue (USD bn)



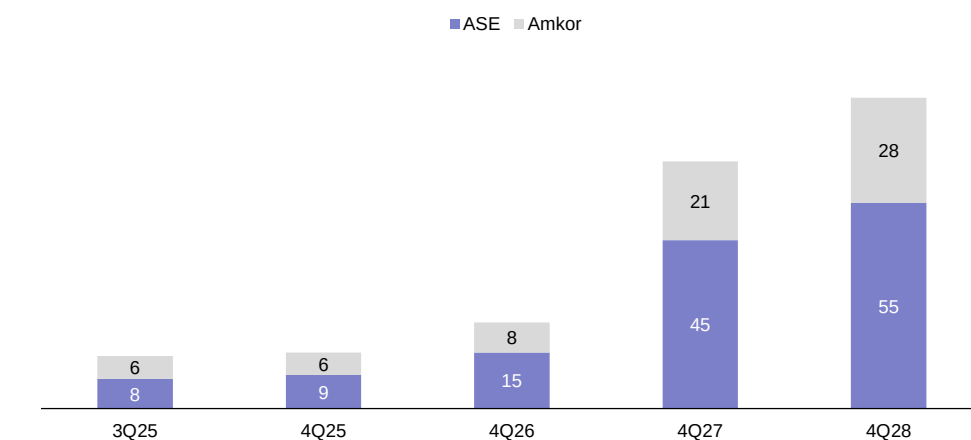
Sources: Company data, GF Securities (Hong Kong) Brokerage

Figure 2: CoWoS based Nvidia's Vera CPU and AMD's Venice CPU

	NVIDIA Vera CPU	AMD Venice CPU
Architecture	Arm v9.2	x86 (Zen 6 Cores)
Core Count	88 cores	Up to 256 cores
Threads	176	Up to 512
Process Node	TSMC N3/N4	TSMC N2/N3
Memory Bandwidth	1.2 TB/s	1.6 TB/s
Packaging Type	CoWoS-R	CoWoS-L
Key Features	1.8 TB/s NVLink-C2C 1.5 TB/s System Memory (3x Grace)	2x CPU to GPU bandwidth & 1.7x overall performance vs. Turin (Zen 5)
Layout		

Sources: Company data, GF Securities (Hong Kong) Brokerage

Figure 3: ASE/SPL, Amkor CoWoS Capacity Forecast (kwpm)



Sources: Company data, GF Securities (Hong Kong) Brokerage

Earnings Revision

By factoring in higher 2.5D capacity and LEAP business, we revise our EPS estimates by +3%/+5% in 2026E/2027E.

Figure 4: Earnings revision

NTD m	2025	2026E		2027E		Change (%)	
		Old	New	Old	New	2026E	2027E
Net sales	645,388	745,568	760,967	869,133	891,308	2%	3%
Gross profit	114,193	151,479	153,523	188,565	194,784	1%	3%
EBIT	50,756	79,079	81,123	106,265	112,084	3%	5%
Pre-tax Income	51,301	81,180	83,224	107,229	112,712	3%	5%
Net profit	40,658	63,939	65,577	83,987	88,374	3%	5%
EPS (NT\$)	9.35	14.64	15.02	19.24	20.24	3%	5%
Key ratios (%)							
Gross margin	17.7%	20.3%	20.2%	21.7%	21.9%		
Operating margin	7.9%	10.6%	10.7%	12.2%	12.6%		
Pre-tax margin	7.9%	10.9%	10.9%	12.3%	12.6%		
Net profit margin	6.3%	8.6%	8.6%	9.7%	9.9%		

Sources: Company data, GF Securities (Hong Kong) Brokerage

Figure 5: ASE's P&L forecast

(NTD m)	2025	1Q26E	2Q26E	3Q26E	4Q26E	2026E	1Q27E	2Q27E	3Q27E	4Q27E	2027E
Sales	645,388	173,663	179,476	197,713	210,116	760,967	203,288	214,377	233,101	240,541	891,308
COGS	531,194	140,630	143,409	157,424	165,981	607,444	161,087	167,486	181,624	186,328	696,524
Gross profit	114,193	33,033	36,067	40,289	44,134	153,523	42,202	46,891	51,478	54,213	194,784
Opex	(63,437)	(16,900)	(17,400)	(18,600)	(19,500)	(72,400)	(19,200)	(20,000)	(21,400)	(22,100)	(82,700)
Operating profit	50,756	16,133	18,667	21,689	24,634	81,123	23,002	26,891	30,078	32,113	112,084
Non-op profit	545	525	525	525	525	2,101	157	157	157	157	628
Pre-tax profit	51,301	16,658	19,192	22,214	25,160	83,224	23,159	27,048	30,235	32,271	112,712
Income tax	(9,460)	(3,332)	(3,838)	(4,221)	(4,780)	(16,171)	(4,632)	(5,410)	(6,047)	(6,454)	(22,542)
Minority interest	(1,182)	(279)	(319)	(499)	(379)	(1,476)	(359)	(399)	(579)	(459)	(1,796)
Net Income	40,658	13,047	15,035	17,494	20,000	65,577	18,168	21,240	23,609	25,357	88,374
EPS (NT\$)	9.4	3.0	3.4	4.0	4.6	15.0	4.2	4.9	5.4	5.8	20.2
Outstanding shares	4,347	4,366	4,366	4,366	4,366	4,366	4,366	4,366	4,366	4,366	4,366
Margin analysis											
Gross margin	17.7%	19.0%	20.1%	20.4%	21.0%	20.2%	20.8%	21.9%	22.1%	22.5%	21.9%
Operating margin	7.9%	9.3%	10.4%	11.0%	11.7%	10.7%	11.3%	12.5%	12.9%	13.4%	12.6%
Pre-tax margin	7.9%	9.6%	10.7%	11.2%	12.0%	10.9%	11.4%	12.6%	13.0%	13.4%	12.6%
Effective tax rate	18.4%	20.0%	20.0%	19.0%	19.0%	19.4%	20.0%	20.0%	20.0%	20.0%	20.0%
Growth (YoY%)											
Sales	8%	17%	19%	17%	18%	18%	17%	19%	18%	14%	17%
Operating profit	30%	67%	83%	64%	39%	60%	43%	44%	39%	30%	38%
Net income	25%	73%	100%	61%	36%	61%	39%	41%	35%	27%	35%
EPS	27%	71%	98%	60%	36%	61%	39%	41%	35%	27%	35%
Product mix (%)											
Wafer	60%	64%	67%	66%	67%	66%	69%	72%	71%	72%	71%
Others	40%	36%	32%	34%	32%	33%	30%	27%	29%	28%	29%

Sources: Company data, GF Securities (Hong Kong) Brokerage

Valuation and Recommendation

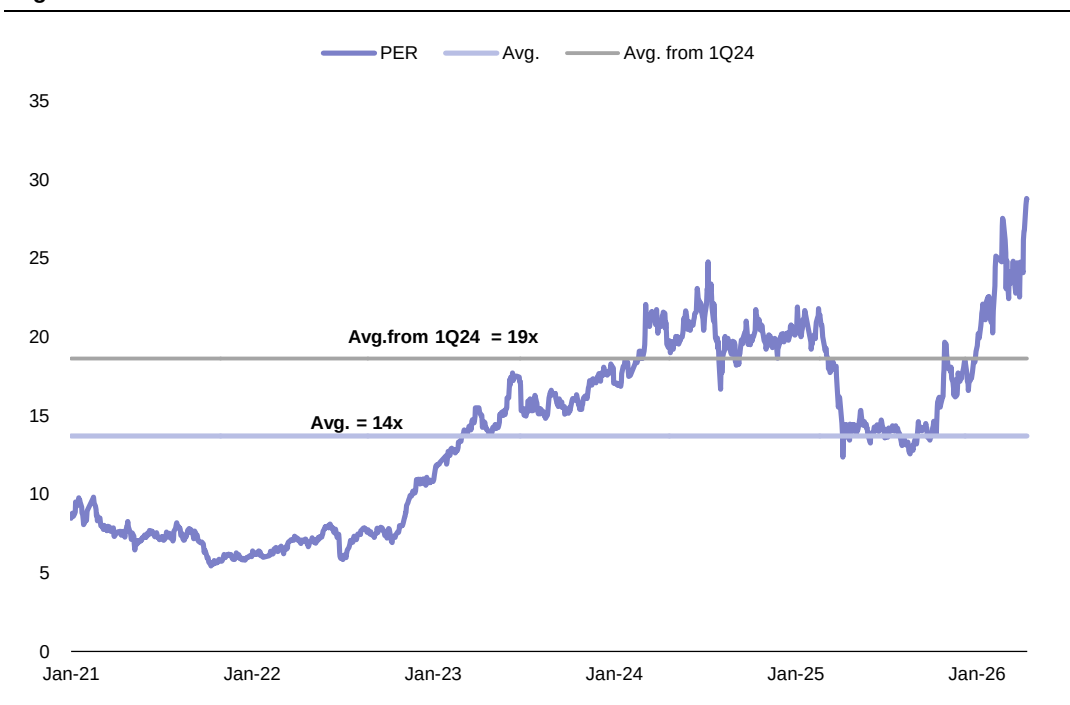
Maintain Buy with TP of \$506

We rate ASE (3711 TT) Buy and set our TP at NT\$506 which is based on 25x our 2027E EPS estimate, or 21x 2028E EPS. We adopt 2027 as valuation basis to capture its robust LEAP business potential which is the key market focus and is expected to see aggressive capacity expansion. We adopt P/E methodology as we believe the market now mainly focuses on the company's earnings outlook.

The ASE/SPIL is the highest-quality OSAT and NO.1 in market share worldwide, backed by superior operational management, M&As, economies of scale, and customer/product diversification. We like ASE as we view it as an AI beneficiary with increasing margin-accretive AI/LEAP business in 2026 and beyond. We believe the business will be driven by oS and CP in 2026, with emerging driver of full process business ramping in 2H26.

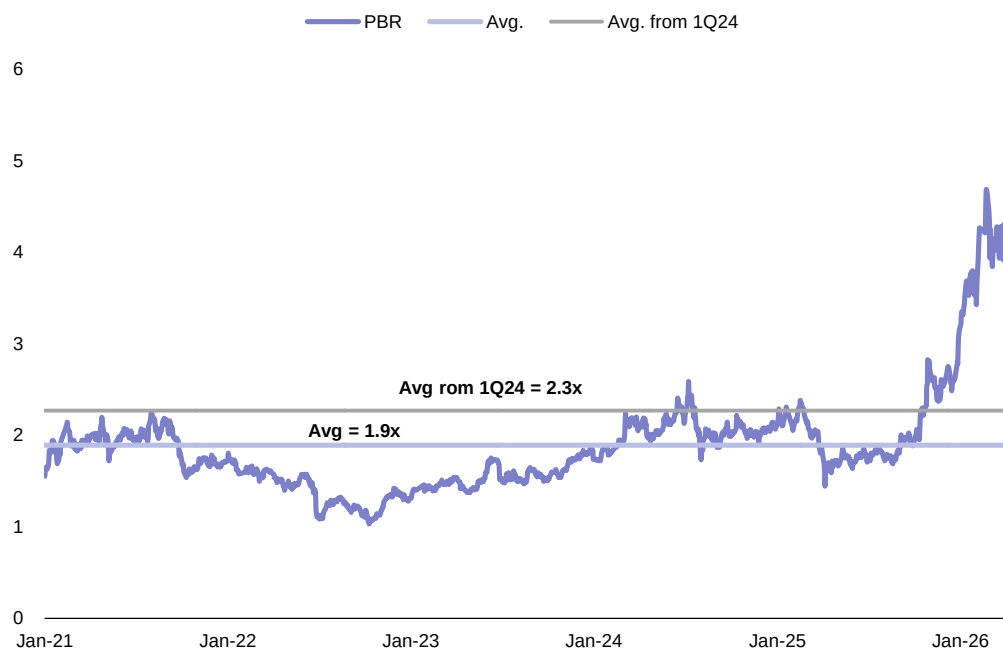
ASE's P/E traded at an average of 14x since 2021 but was up to an average of 19x since 1Q24 when the company meaningfully started AI business. We derive our target price based on 25x P/E, which is 25~30% higher than the mid-cycle level given its fast-growing AI momentum. From peers comparison, our target P/E of 25x is inline with ASE's peers.

Figure 6: ASE's 12-month forward P/E



Sources: Company data, GF Securities (Hong Kong) Brokerage

Figure 7: ASE's 12-month orward P/B



Sources: Company data, GF Securities (Hong Kong) Brokerage

Risks

1) AI slowdown; 2) consumer demand; 3) peer competition; 4) capacity delay.

Balance Sheet						NTD mn
	2024	2025	2026E	2027E	2028E	
Current assets	275,285	313,795	336,861	375,577	408,570	
Cash and cash equivalents	84,883	100,223	87,376	85,209	88,300	
Inventory	57,314	65,673	75,100	86,113	93,931	
Accounts Receivable	113,420	125,042	147,435	172,689	191,359	
Other current assets	19,668	22,857	26,950	31,566	34,979	
Non-current assets	465,413	575,538	704,584	817,918	899,780	
Long-term equity investment	37,118	41,569	46,569	51,569	56,569	
Fixed assets	312,531	421,115	545,160	653,495	730,357	
Other long-term assets	115,763	112,854	112,854	112,854	112,854	
Total assets	740,698	889,333	1,041,445	1,193,495	1,308,350	
Current liabilities	230,940	244,349	290,490	339,283	372,785	
Accounts Payable	78,221	88,754	101,494	116,378	126,944	
Short-term borrowings	53,872	40,734	53,565	64,278	70,063	
Other current liabilities	98,847	114,861	135,431	158,628	175,778	
Non-current liabilities	230,940	244,349	290,490	339,283	372,785	
Long-term Debt	139,728	214,081	281,516	337,819	368,223	
Other non-current liabilities	24,243	57,536	57,536	57,536	57,536	
Total liabilities	394,911	515,966	629,542	734,639	798,544	
Total Equity	345,787	373,368	411,903	458,855	509,806	
Share Capital	44,153	44,480	44,480	44,480	44,480	
Additional Paid-in Capital	155,424	162,249	162,249	162,249	162,249	
Retained earnings	123,947	140,171	178,706	225,659	276,610	
Preferred Stocks	22,264	26,468	26,468	26,468	26,468	
Total Liabilities & Equity	740,698	889,333	1,041,445	1,193,495	1,308,350	

Income Statement						NTD mn
	2024	2025	2026E	2027E	2028E	
Revenue	595,410	645,388	760,967	891,308	987,674	
Cost of sales	498,478	531,195	607,444	696,524	759,761	
Gross profit	96,932	114,193	153,523	194,784	227,913	
Operating Expense	57,765	63,437	72,400	82,700	91,400	
Operating profit	39,166	50,756	81,123	112,084	136,513	
Interest Income	6,777	7,503	-5,899	-7,372	-8,404	
Interest Expense	868	814	2,000	2,000	2,000	
Net other Non-op. Income/(Loss)	-5,128	-7,772	6,000	6,000	6,000	
Pre-tax profit	41,683	51,301	83,224	112,712	136,109	
Income tax	7,758	9,460	16,171	22,542	27,222	
Profit for the year	33,926	41,841	67,053	90,170	108,887	
Minority interest	-1,443	-1,182	-1,476	-1,796	-2,116	
Net profit to ord. equity	32,482	40,658	65,577	88,374	106,771	
EPS (NT\$)	7.4	9.4	15.0	20.2	24.5	

Cash Flow Statement						NTD mn
	2024	2025	2026E	2027E	2028E	
Operating cash flow	114,867	110,661	139,528	177,838	208,163	
Profit for the year	32,482	40,658	65,577	88,374	106,771	
Depreciation & amortization	59,815	67,440	78,555	94,266	105,578	
Change in working capital	23,437	3,377	-2,604	-2,802	-2,185	
Others	-868	-814	-2,000	-2,000	-2,000	
Investing cash flow	-119,132	-176,752	-205,600	-205,600	-185,440	
Capex	-103,715	-172,191	-202,600	-202,600	-182,440	
Change in investment	-12,116	-3,637	-3,000	-3,000	-3,000	
Others	-3,301	-924	-	-	-	
Free cash flow	11,152	-61,530	-63,072	-24,762	25,723	
Financing cash flow	22,585	94,507	80,267	67,016	36,189	
Change in Capital	-	-	-	-	-	
Net Change in Debt	22,605	61,214	80,267	67,016	36,189	
Others	-20	33,293	-	-	-	
Exchange influence	9,600	-5,898	-	-	-	
Net increase in cash	18,320	28,417	14,195	39,254	58,912	

Key Financial Ratios					
	2024	2025	2026E	2027E	2028E
Growth					
Revenue growth	2.3	8.4	17.9	17.1	10.8
Operating profit growth	-2.9	29.6	59.8	38.2	21.8
Net profit growth	2.4	25.2	61.3	34.8	20.8
Profitability					
Gross profit margin	16.3	17.7	20.2	21.9	23.1
Operating Profit Margin	6.6	7.9	10.7	12.6	13.8
Net profit margin	5.5	6.3	8.6	9.9	10.8
Key Ratio					
ROA	4.4	4.6	6.3	7.4	8.2
ROE	9.4	10.9	15.9	19.3	20.9
Stability					
Gross debt/equity	1.1	1.4	1.5	1.6	1.6
Interest Coverage	-17	-15	24	24	25
Current Ratio	1.2	1.3	1.2	1.1	1.1
Quick Ratio	0.9	1.0	0.9	0.9	0.8
Net debt/equity	0.6	0.7	0.8	0.9	0.9

Rating definitions Benchmark: Hang Seng Index (Hong Kong)

Company ratings	Buy	Stock expected to outperform benchmark by more than 10%
	Hold	Expected stock relative performance ranges between -10% and 10%
	Underperform	Stock expected to underperform benchmark by more than 10%

Sector ratings	Positive	Sector expected to outperform benchmark by more than 10%
	Neutral	Expected sector relative performance ranges between -10% and 10%
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